

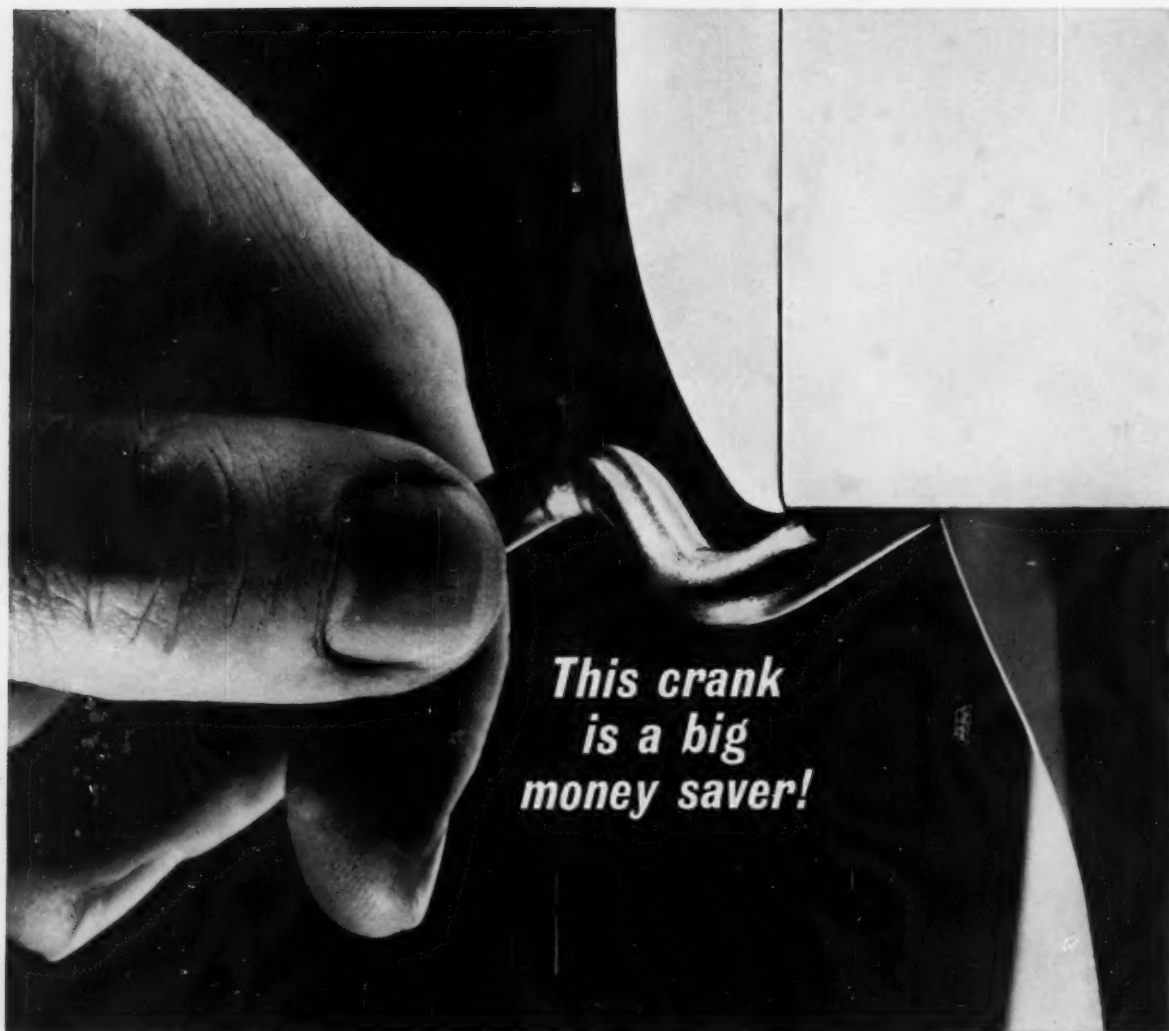
THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

THE *Nation's Schools*

DECEMBER



**How To Write a
Policy Handbook • What
Administrators See Ahead for
Teaching Machines • How To Make Bleachers
Last for Decades • What A.S.B.O. Did
in Canada • Cover: 'Middle' School, Not Junior High**



***This crank
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Westroll cuts waste by making people "work" to get the paper toweling they actually need!

Actual surveys show that people crank out just enough Westroll paper toweling to do the job.

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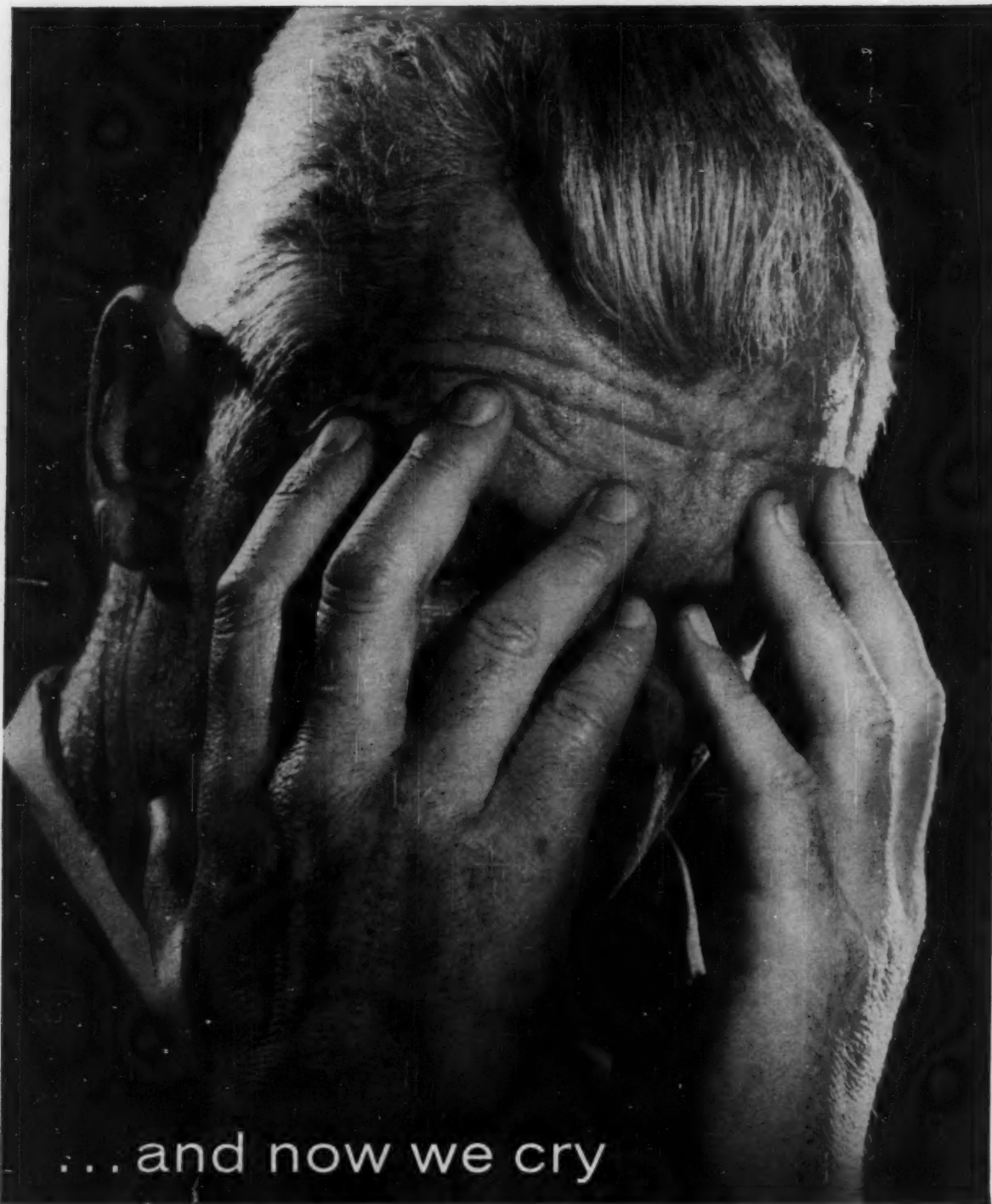
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...and now we cry

Where were the voices before this tragedy occurred that are raised in crusade chorus now? Who heard the pleas for better fire protection before this deadly reminder? When will we forget the tragedy that now prompts action . . . the reason now we cry?

Gamewell Master Fire Alarm Boxes can prevent many tragedies. This direct-to-Fire-Department system saves time — and on-time equipment and men save lives and property.

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BLISS

FIRST... WHEN SECONDS COUNT

THE Nation's Schools

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

DECEMBER 1961

How To Write a Policy Handbook

54 Natl B. Burbank

Here is a step-by-step account of how the busy school administrator can direct the writing or revising of a policy handbook for his district, how he can involve teachers and other employees in its production, and how, in the process, he can facilitate efficient administration, avert misunderstandings, and bolster employee morale.

Found: How To Make Bleachers Last for Decades

58 Ernest N. Rodbro

Many schools run up big bills in replacing the wood in their spectator bleachers. By using a wood preservative treatment, New Trier Township High School has found a way, it believes, to make its bleachers last for several decades. And, it is expected that the costs of treatment will be more than offset by savings on paint and replacement.

New Research Gets A.S.B.O. Limelight in Canada

61

The Association of School Business Officials expounded and personified new research at its annual meeting in Canada. Members heard reports of 10 research committees, called for a broadening of research activities, proposed a new committee on data processing, and commended research as a means of strengthening the unity of national and state and provincial associations.

Why School Planners Must Be Educators

67

Since the school building is an integral part of the educational program and not merely a house for it, school planners also must be educators, delegates were told at the 38th annual meeting of the National Council on Schoolhouse Construction. The plant specialists pinpointed educational objectives and explored the implications for planning new buildings.

Vol. 68 No. 6

Title® at U.S. Patent Office.

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Continued on next page

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THE Nation's Schools

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OPINION POLL

There's No Substitute for Textbooks 60

Although self-teaching devices and programed instructional materials will be used increasingly in our public schools, say the majority of respondents, they will supplement rather than replace textbooks in the future.

SCHOOLHOUSE PLANNING

The How and Why of the 'Middle' Schools 43 G. E. Mills

The two new Middle Schools in Saginaw, Mich., housing Grades 5 to 8, are an experiment that seeks to improve the transition between the self-contained classroom of the primary school and the diverse environment of the senior high school.

SCHOOL LUNCH

Classify Personnel To Reduce Costs 70 R. N. Malonek

Here's how a district classified food service jobs according to importance and established rate ranges accordingly. Labor costs were reduced and the district stayed out of the red.

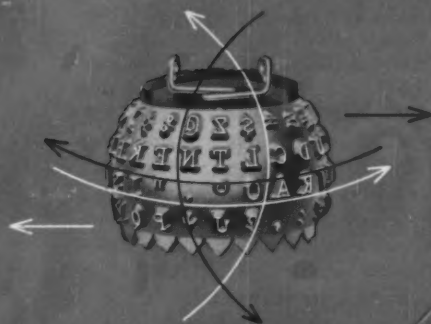
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the
turning
point

in the teaching of typing



You are looking at the IBM SELECTRIC Typewriter, newest addition to the IBM typewriter line. The unusual object beside it is its typing element. No bigger than a golf ball, this single element makes possible the fastest, easiest way to teach typing, brings new economy to modern teaching methods.

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Builds confidence! In many other ways the IBM SELECTRIC helps improve typing speed and technique, makes even beginning

students more proficient. For example, a unique storage system actually remembers — when necessary — one character while another is being printed, paces it out at a measured rate to level "typing flurries," improve typing rhythm.

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Minimum downtime! The IBM SELECTRIC is remarkably rugged. With a single typing element instead of multiple typebars, and a stationary paper carrier, maintenance requirements are kept at a minimum.

Moderate cost! We urge you to have the moderately priced IBM SELECTRIC shown in your school soon. We think you will agree that this newest development from IBM research is an important milestone in classroom progress.

IBM

A NEW KIND OF TYPEWRITER... A NEW WAY TO WRITE!

ADMINISTRATOR'S

CLINIC

by **CALVIN GRIEDER**
Professor of School Administration
University of Colorado

Pool State Resources To Prepare Administrators

ABOUT two years ago the A.A.S.A. Committee for the Advancement of School Administration estimated that the annual demand for newly trained superintendents was about 800. The number required each year probably is declining at a small rate; in any case, it is highly unlikely that it will increase.

The number required for secondary school principalships is, of course, somewhat larger: Would two or three times the figure for superintendents be close? And the number for elementary school principalships to be filled each year must be several times as large.

When one examines the number of school districts in individual states, he is compelled to ask how many programs for the education of superintendents (and perhaps for secondary school principals, although that is not my main concern here) are needed.

The number of operating districts in selected states, as of recent report, is as follows:

NEW ENGLAND

Connecticut	176
Maine	461
Massachusetts	362
New Hampshire	218
Rhode Island	39
Vermont	257
Total	1513

SOUTHEAST

Alabama	114
Florida	67
Georgia	198
Louisiana	67
Mississippi	151
North Carolina	174
South Carolina	108
Total	879

ROCKY MOUNTAINS

Colorado	290
Idaho	149
Montana	891
New Mexico	93
Utah	40
Wyoming	221
Total	1684

FAR WEST

Arizona	295
California	1710
Nevada	17
Oregon	584
Washington	419
Total	3025

It must be remembered that not all districts employ superintendents, particularly in states with large numbers of districts where rural schools are administered and supervised directly by local boards and county superintendents.

In each of the four regions mentioned previously, it seems fairly apparent that in at least one state it would be hard to justify the operation of any program for the superintendency as far as meeting the needs of that state are concerned.

In all these regions, fewer programs are required than now exist. Other regional groups of states could be suggested readily, in some instances combining only three or four states.

All this causes me to wonder if states ought not to form regional compacts to prepare superintendents, as they have for other professional programs.

Eight years ago, in August 1953, to cite a notable example of interstate cooperation, the Western Interstate Commission for Higher Education (W.I.C.H.E., pronounced witchy), was organized by 11 Western states

and chartered by Congress. Its purpose is to administer a compact by which the member states (with the addition of Alaska and Hawaii now numbering 13) pool their resources to expand certain specialized educational opportunities for young people in the West, and to increase the supply of professionally trained manpower.

One of the major enterprises conducted by W.I.C.H.E. from its headquarters at the University of Colorado is an exchange program by which students whose home states do not provide certain professional training programs can get their education in some other member state. In 1960-61, 336 students were enrolled in medicine, dentistry and veterinary medicine outside their home states, with substantial financial help afforded by the commission.

The commission also conducts research in nursing education, training of personnel for special education, and other areas, with a view toward expanding the exchange program and toward solving other problems of higher education in the West.

The budget of W.I.C.H.E. currently is about half a million dollars. Each state appropriates \$10,000 a year, and other funds, equivalent to about \$2.50 for each dollar of state money, come from private foundations and federal government agencies.

Some who have thought about the problem of preparing superintendents have held to the belief that such programs ought to be the capstone of strong underlying teacher education programs. They also believe that the preparation of elementary and secondary school principals should be regarded as aspects of the total administration program. In other words, graduate programs focused on just the superintendency would be incomplete. (Cont. on p. 14)

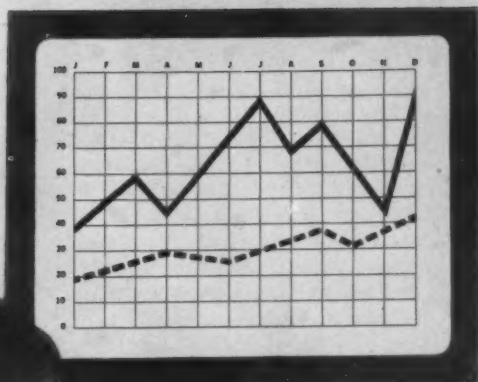
BIOGRAPHY OF A SUPERINTENDENT

*When things are on an even keel
The poor man gets no credit;
But let some sudden storm begin
To rock the fragile boat*

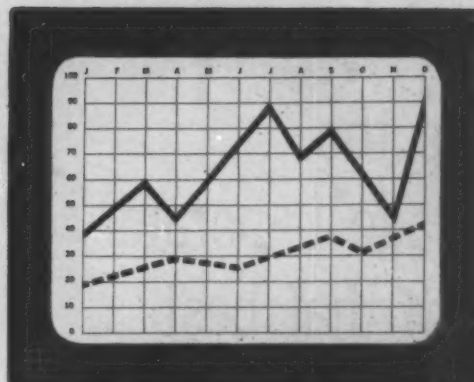
he's in —

*Who'll get the blame? You
said it!*

— Stephen Schlitzer



\$1.50
24 Hours
Film Processor



55¢
90 Seconds
Yourself
(with a Polaroid Land Camera)

To make your own black-and-white slides — quickly and economically — here's all you have to do: snap a picture with a Polaroid Land Camera loaded with special transparency film. Then pull a tab, wait a moment and open the rear of the camera.

There's your transparency.

After a quick hardening and mounting in a snap-together frame, the slide is ready to be dropped into a projector. Total time: about 90 seconds. Total cost: about $\frac{1}{3}$ the price of the average black-and-white slide.

A new type of transparency film, PolaLine film, is now available. It's been designed especially for line-copy

slides and it produces crisp, black lines and clear, transparent backgrounds. These are $\frac{3}{4}$ x 4 transparencies for standard lantern slide projectors.

There are also continuous tone films for both standard lantern slide projectors and for use in a complete Polaroid Land system that employs $2\frac{1}{4}$ x $2\frac{1}{4}$ slides in a Polaroid projector. (Development time for continuous-tone slides is two minutes.) All three projection film types can be used in any Polaroid Land Camera that uses 40-series films (except the J-66).

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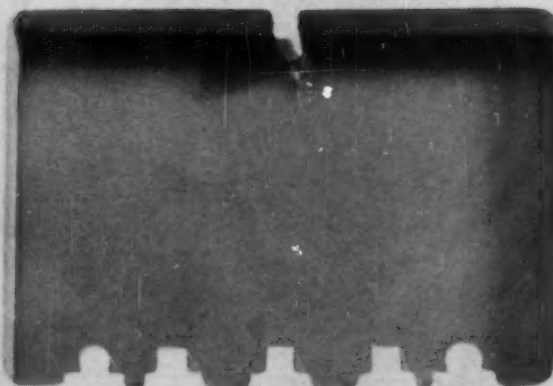
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TWO-CHANNEL TAPE CARTRIDGE

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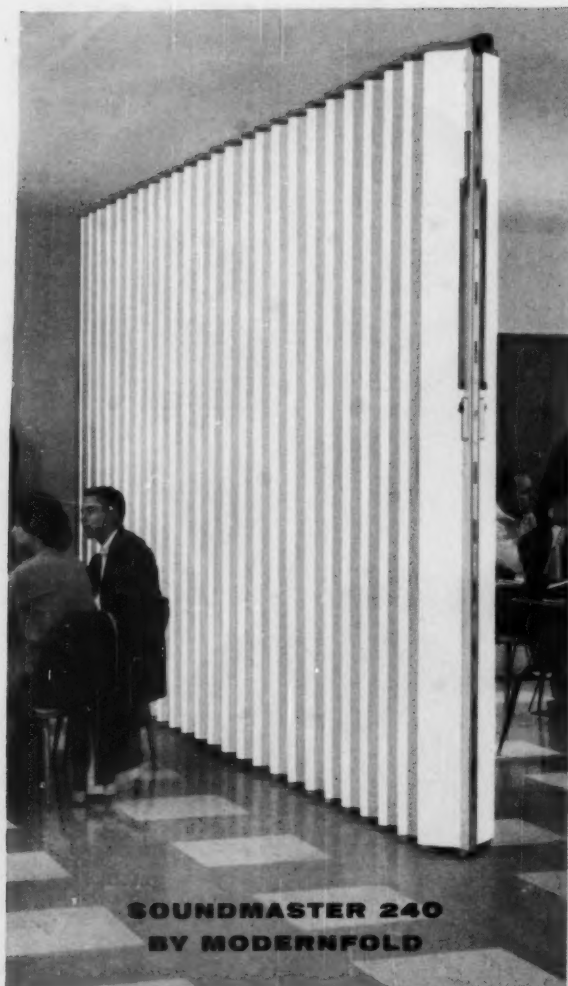
tape recorder, the magnetic disc, and the two-channel tape cartridge . . . were first introduced by Magneticon to the language teaching field.

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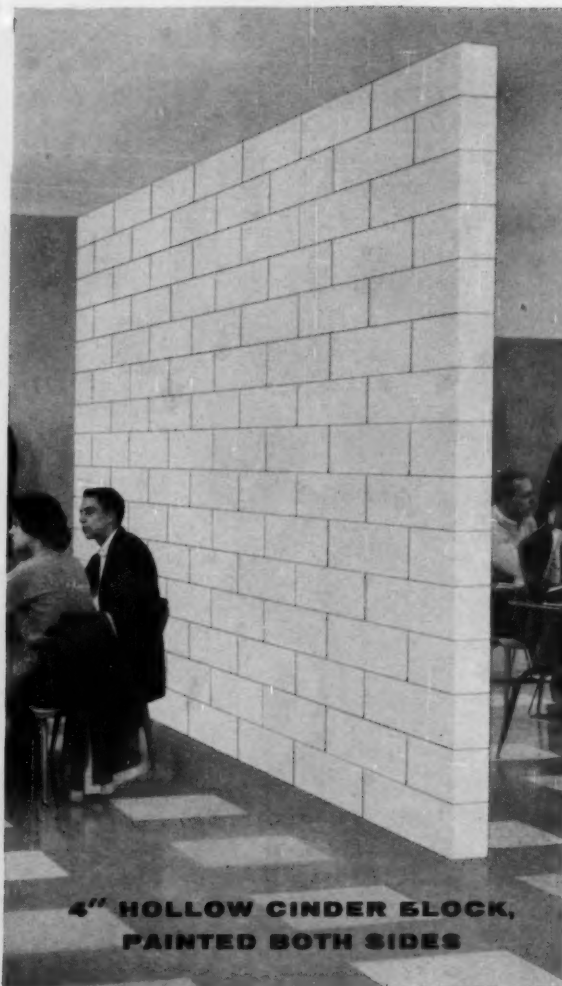
duced, a system so simple to operate that it requires no instructions.

And now, the all-new TRW Magneticon two-channel tape cartridge completely eliminates tape threading, breakage, and spillage.

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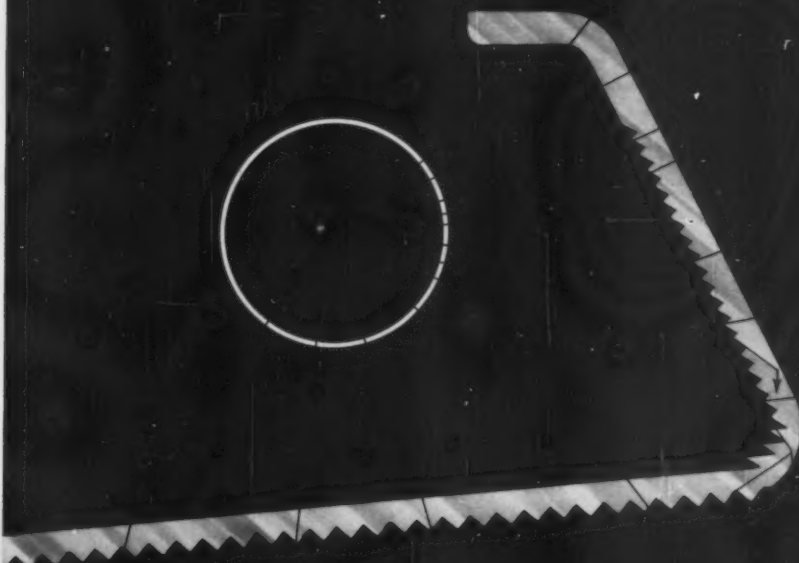
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TESTS PROVE:**

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A REPORT ON LOS ANGELES' OPERATION SCHOOL BURNING No. 2

OPERATION SCHOOL BURNING No. 2, conducted in 1960-1961, was the second of two series of tests sponsored by the Los Angeles Fire Department, Board of Education, and Roman Catholic Archdiocese. Purpose of Operation School Burning No. 2 was to study fire protection techniques in open stairway, multistory school buildings. Many types of fire detection devices and sprinkler systems were tested under a variety of conditions. In all, 117 fires were set deliberately in a condemned high school. The results reported here were compiled under supervision of the National Fire Protection Association.



Smoke Sentry all fire detectors

Smoke Sentry sounded alarm first in 8 out of 10 official tests

Honeywell's Smoke Sentry was matched against seven competitive fire detectors (all major types included) in schoolroom fire tests conducted by the Los Angeles Fire Department.

Honeywell's Smoke Sentry was *first* to detect fire in 8 out of 10 tests in the only series conducted primarily to measure the response time of automatic fire detectors. All fire detectors were set for normal operating conditions.

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Smoke Sentry adds life-saving minutes to crucial evacuation time

Honeywell's Smoke Sentry is the fastest system available because it detects the first sign of fire . . . *smoke*.

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And to meet specific operating conditions, the Smoke Sentry can be adjusted for different densities of smoke.

Honeywell's Smoke Sentry is a vital tool in the protection of young lives and valuable property. It is just one of Honeywell's wide range of reliable fire detection and alarm systems.

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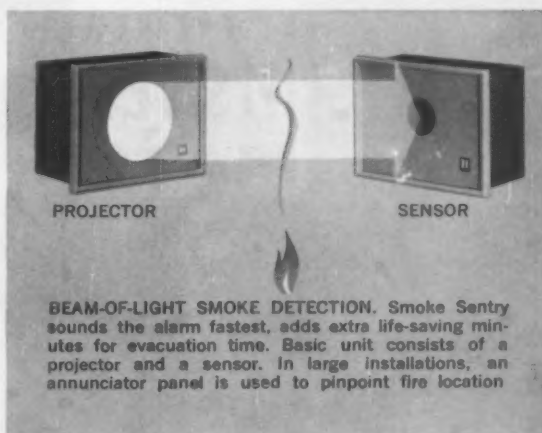


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Please send additional information on Operation School Burning II.

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Administrator's Clinic

(Continued From Page 6)

This is a matter of opinion and judgment which is difficult to decide. I doubt that there is any research to support this view.

However, the public school superintendency is increasingly recognized as a high-level administrative career, different from other administrative work in public education. It would not be too hard to make a case for interstate, regional, cooperative programs, which would have a much better chance of being *strong* than do

the numerous programs now in effect.

But who is hardy enough to suggest which programs should be closed? This is a different problem from that of medicine, dentistry or veterinary medicine because in these fields some states never have had graduate or professional programs. It isn't a question of liquidating any programs, but a relatively much more simple question of how to arrange for such training in other states, thus avoiding the initiation and upkeep of costly and weak small operations for various professional fields in states lacking such programs. ■



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New Three-Year Guarantee covers Clarke Heavy Duty Floor maintainers from 14 to 23 inch brush diameters, including FM-14, FM-15, FM-17, FM-20 and FM-23. It unconditionally guarantees them to give you trouble-free performance in scrubbing, polishing, buffing,

waxing, disc sanding and grinding all types of floors and shampooing rugs and carpets. Covers Clarke Heavy Duty wet-dry vacuum cleaners, Models 610, 620, 710, 720 and 730—guarantees them to pick up dust, dirt and liquids, clean everything from floor to ceiling.

STRONGEST GUARANTEE IN THE INDUSTRY...

Effective immediately, all parts of Clarke Heavy Duty Floor maintainers and wet-dry vacuum cleaners—except normal wear items such as brushes, etc.—are guaranteed against defects in materials and workmanship for three full years from date of purchase.

GIVES ASSURANCE OF CLARKE QUALITY...

Because of its pre-tested materials and careful

manufacture, that result in customer satisfaction through trouble-free service and minimum service, Clarke has extended its guarantee from one year to three. With this long, foolproof guarantee, you can be certain Clarke machines will give you years of efficient performance and dependable service.

Your Clarke distributor will be glad to prove this. Call him—or write us and we'll arrange a demonstration on your floors.



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RUG SHAMPOOER



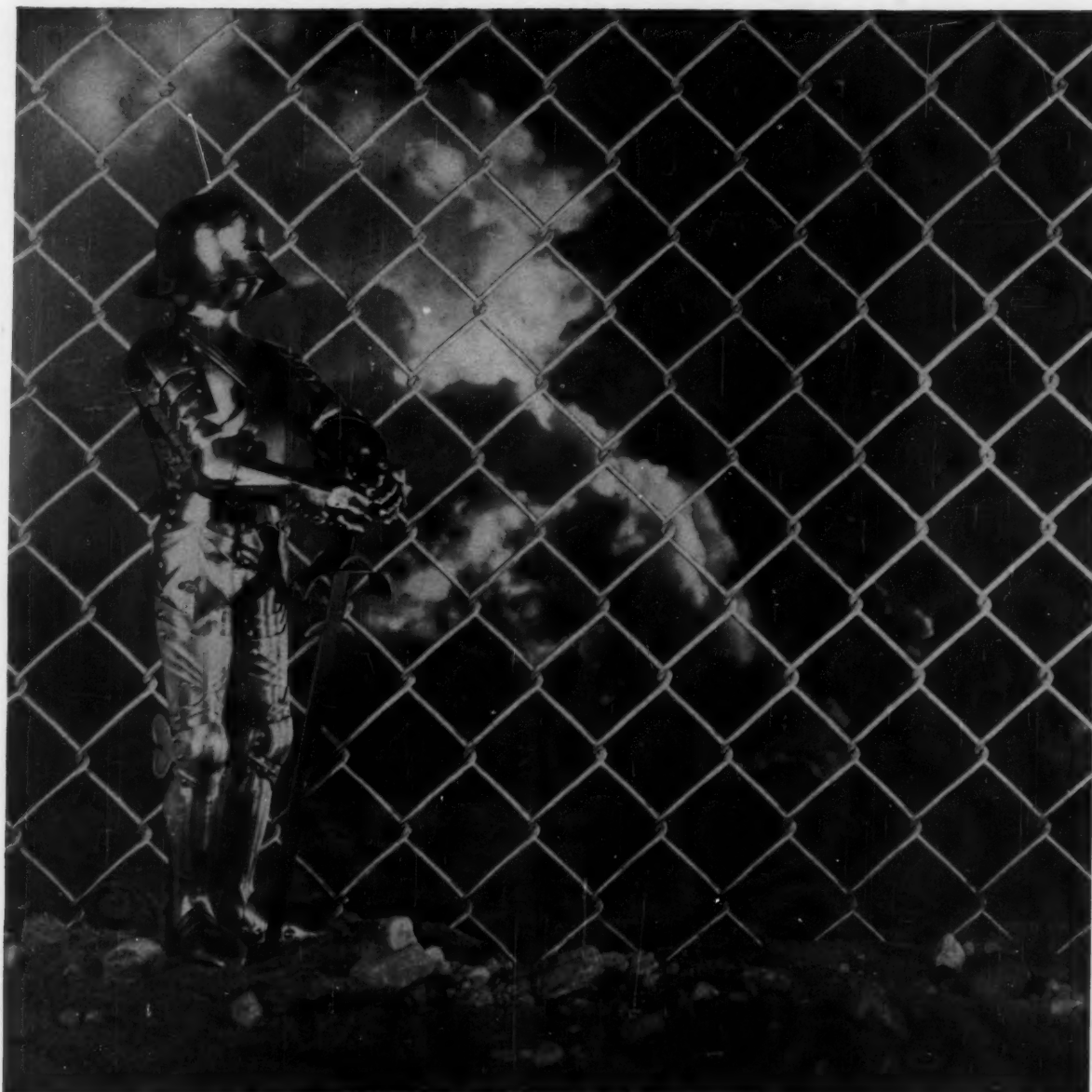
WET-DRY VACUUM



FLOOR MAINTAINER



CLARKE-A-MATIC



Recognize this symbol of protection?

It's a Realock Chain Link Fence—the safe, permanent way to protect your property. Realock's quality fabric is made from top grade steel wire that withstands lots of punishment. For long-lasting protection, the fabric is expertly galvanized to prevent corrosion.

Realock Fence is available in a variety of styles. For a free estimate and complete details about Realock Fence, call the nearest CF&I sales office.

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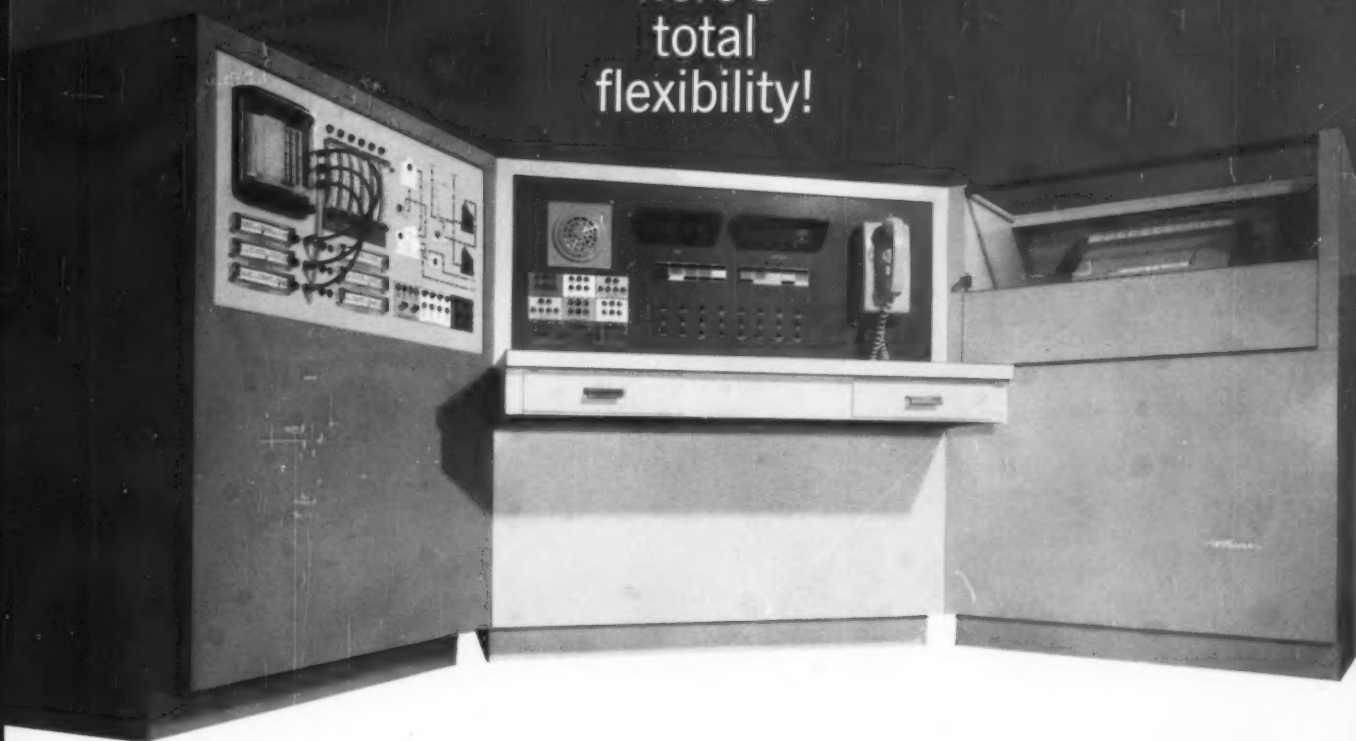


The Colorado Fuel and Iron Corporation
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ANNOUNCING

JOHNSON CONTROL CENTER MODULES

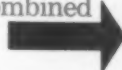
here's
total
flexibility!



The most advanced development in centralized temperature control, new Johnson modular units permit complete flexibility in control center design and operation. They are adaptable to all transmission systems — pneumatic, electric, electronic.

Besides temperature control, many other functions, such as lighting control, power plant control, communications, and alarm systems, may be integrated into the center. The wide choice of features ranges from conventional data indication and control to automatic digital printing, closed-circuit TV, and screen-projected floor plans and system diagrams. You use as many or as few modules as you wish. Each module is custom-equipped.

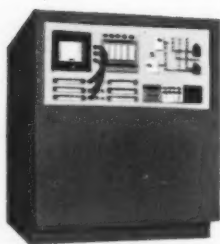
Johnson Control Centers are ideal for both new and existing systems in commercial, industrial, and public buildings of any size. For examples of how these compact modular units can be combined to increase system efficiency and make more effective use of manpower, turn the page . . .





Keyed to the Needs of the Individual Building...

Johnson Control Center Modules offer unmatched opportunities for systems efficiency and savings. Check the features of this typical grouping and see why.



MISCELLANEOUS DATA MODULE

Pneumatic indicating receivers, mounted horizontally or vertically, provide continuous indication of key temperatures and pressures. Integral switches indicate off-normal conditions. Optional recording of variables is provided by three-pen, plug-in recorder. Interlocked circuits provide automatic sequence motor control of refrigeration system. Visual indication of operation, manual override, and graphic diagram of the system are also included.



CONTROL CONSOLE

Contains digital clock, digital indication of variables, visual and audible alarms, and intercom system. Master switches determine mode of operation of digital indication and logging. Switches include master on-off, off-normal scan, all-point scan, point hold, scan locked out, printer locked out, off-normal alarm release, audible alarm release, audible alarm locked out, and audible alarm test. Centralized security checks and alarms can easily be included also.



DATA LOGGING MODULE

A high-speed, automatic digital printer provides the building engineer with a permanent record of control data. All off-normal values are printed in red; normal values are printed in black. With parallel print-out, all keys print simultaneously, thus speeding data collection. Logging rate is adjustable up to one point per second. Using Johnson modules, a single center can provide centralized supervision and control for as many as a dozen or more buildings!

Johnson Modular Units Allow You to Centralize All Types of Systems Supervision and Control

AIR CONDITIONING — HEATING

Continuous visual indication of key temperatures, humidities, pressures, liquid levels, etc.
Continuous or optional recording of variables.
Automatic data logging of variables.
Boiler surveillance: steam, oil, and gas pressures; oil level; boiler alarms.
Manual or automatic start-stop controls for fans, pumps, and motors; indicator lights.
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Metering of power, water, other services.
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Summer/winter switchover.
Remote temperature reset.
Indication of filter conditions, valve and damper positions, fuel reserves.
High-low limit alarms.

GRAPHIC DIAGRAMS

Color coded representation of system and equipment on panels or screen-projected slides.

FIRE AND RAID ALARMS

Fire detection system with central alarm and location indication.
Conelrad air raid warning tied into central alarm and communication systems.

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Centralized programming of master and individual clocks and time signals.

SECURITY SURVEILLANCE

Closed circuit TV from remote areas.
Audible alarms; sound detection.

LIGHTING SYSTEMS

Manual or automatic programming.
Light level controls.

COMMUNICATIONS

Master intercom and music systems.
Paging center.
Closed circuit TV and radio intercom for remote supervision of repairs and installations.

MISCELLANEOUS SYSTEMS

Snow melting, lawn and sprinkler systems, control.
Time recording systems, machine operations.
Indication of gas, radiation, or other hazardous conditions.
Transformer indication and control.
Indication and control of boiler and turbine operations.
Feed water conductivity, analysis, and flow.
Domestic hot water control.

JOHNSON CONTROL

PNEUMATIC SYSTEMS

DESIGN • MANUFACTURE • INSTALLATION • SINCE 1885

For details about Johnson Control Centers, write for Bulletin 1040.
Johnson Service Company, Milwaukee 1, Wisconsin.

Printed in U.S.A.



*Charlie
the Destroyer*

WHAT'S GOING ON HERE?

Why, Charlie the Destroyer is trying to rip the tape, but he can't because LEVOLOR plastic tape is re-enforced two ways. Take a plastic fabric, impregnate this under pressure with more plastic, and you have LEVOLOR two-way re-enforced tape, a tape to resist the efforts of the most mischievous student in the school.

Information that insures the best installation possible is a service all LEVOLOR representatives will give you. They will submit a prospectus covering every detail of your Venetian Blind installation—help with the specifications and make a final inspection *after* the blinds are installed. It is a service that guarantees good specifications and good Venetian Blinds.

LEVOLOR TRADE MARK OF LEVOLOR LORENTZEN VENETIAN BLINDS
AUDIO-VISUAL CONVENTIONAL SKYLIGHT

Levolor Lorentzen, Inc., 720 Monroe St., Hoboken, N. J.



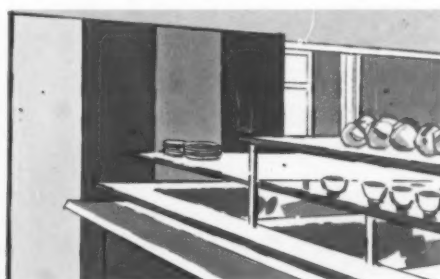
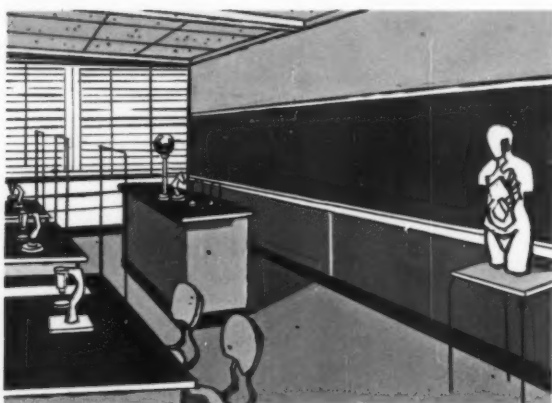
Porcelain Enamel Walls bring 2-way savings in schools

Colorful, *carefree* interior walls are practically a "must" in modern school design. With less window area in classrooms, there is a need to brighten up interior wall surfaces. And they must require little maintenance.

Porcelain enamel Wall Panels provide many advantages for such applications. They are colorful, durable, withstand hard abuse, easily wipe clean with a damp cloth. They are quickly installed, require no special tools or skills. Finally they are relatively low in cost, permitting you to stretch school construction dollars.

The lifetime porcelain enamel is *fused* to lightweight steel. Panels come to you ready for installation. Aluminum molding can be *porcelain enameled to match* if desired. You get a complete package. And you can choose from literally hundreds of colors.

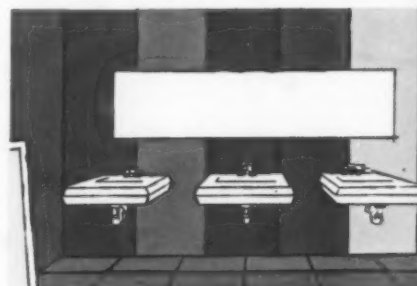
With Porcelain enamel Panels you get both *low initial cost* and *rock-bottom maintenance*, proved in thousands of installations. Porcelain enamel Panels are available in a *variety of finishes* from long-established, highly reputable companies. Look them up in Sweet's! Call them in! Or write us for further information. FERRO CORPORATION, 4150 East 56 Street, Cleveland 5, Ohio.



Distinctive, cheerful, attractive, are school foyers in colorful Porcelain enamel. Practical, too, as they require little or no maintenance.

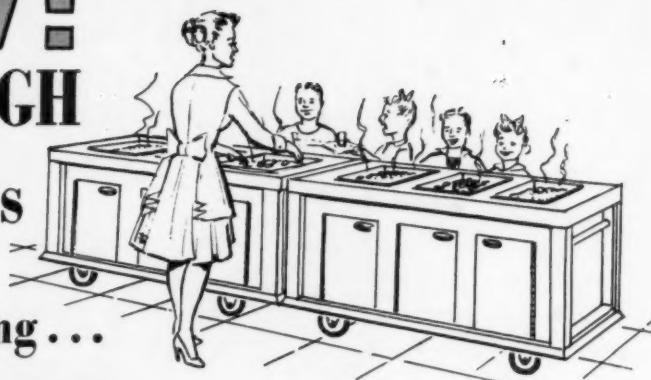
Carefree beauty and utility are combined in the classrooms at left. Even the chalkboards are porcelain-enamel-on-steel for long, low-cost service.

School cafeterias and washrooms lend themselves to color, an excellent use for Porcelain enamel Panels with their fused-in lifetime color, easy cleanability.



NEW! SWARTZBAUGH

Mod-U-Carts
eliminate
costly custom building...

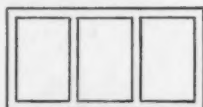


- Color Styling
- Convenient 34" Serving Height
- Complete Temperature Control
- Fully Insulated — Including Covers
- Ample Capacity

Sized To Meet Your Needs



Two Top Openings
Serves up to 125



Three Top Openings
Serves up to 200



Four Top Openings
Serves up to 300

The SWARTZBAUGH Mod-U-Cart makes an excellent food service unit for schools. The modern design of this model permits several Mod-U-Carts to be joined together to form a portable cafeteria line. After use, the carts can be returned to a remote storage area, making the space previously used as a cafeteria available for other activities. The Mod-U-Cart can also be used individually for feeding pupils in their class rooms, in either centralized or decentralized programs. Light, yet designed with rugged strength, the Mod-U-Cart can be easily loaded on and off automotive carriers for hauling over long distances. Full insulation, including covers, keeps foods warm while in transit . . . even on the coldest days.

Write for full line catalog No. 552 for description and illustration of Swartzbaugh's complete school food service line.

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Easy to store! Easy to fold and unfold! Easy to clean! Built for years of rugged service. Seats 16 comfortably.

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PORTABLE-FOLDING
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Has the Exclusive "Piggy Back" Storage Feature. A Table that can change your multi-purpose room into a cafeteria, classroom or lecture hall in seconds. With the "Piggy-Back", your 12 standard folding chairs store right with the table.



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Easy folding! Compact storage! Designed for beauty and strength!

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Features the "Hide-Away" Net. A quality champion built for championship play. Store it in a closet! Glide it into place! Open with "feather touch" . . . and you're ready to play. Regulation net stores inside table in tucked position and extends to official width when opened.



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Sturdy, durable! Compact folding! Ideal for music and band rooms.

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FOR CHAIRS-TABLES**



The fast, easy, safe way to handle folding chairs and tables. Durable construction engineered for years of efficient service.



**PEDESTAL LEG
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Plenty of leg room with the "Off-Center" leg principle, which adds seating to ends. Lightweight, sturdy, folds compactly for easy stacking.

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ON THE SHELF

with James M. Spinning

At Last! Good Teaching Is More Than Neat Chalkboards

WHO'S A GOOD TEACHER? Edited by William J. Ellena, Margaret Stevenson, and Harold V. Webb. American Association of School Administrators, 1201 16th St., N.W., Washington 6, D.C., 1961. Pp. 54. Paperback, \$2. Discount for quantity.

EVERY last one of us knows a good teacher when we see him. Applying our analysis of his traits, we can not only rate the performance of all other teachers but infallibly predict the degree of success of a thousand job candidates. Our only trouble comes in getting other people and the facts to concur. Of course, we know that, too.

Our problem is cogently presented in a wide-paged, handsomely printed joint publication of the A.A.S.A., the Department of Classroom Teachers of the N.E.A., and the National School Boards Association, with a strong and properly acknowledged assist from Professor Nicholas A. Fattu of the Institute of Educational Research at Indiana University. It is subtitled "An analysis of what research says to the school administrator, the classroom teacher, and the school board member about evaluating teacher effectiveness."

What has research told us so far? On first reading one might conclude that the mountain of research has brought forth a pretty puny mouse. Reading again, we admit that, however dedicated, it was more hillock than mountain that labored — a hillock of spare-time, part-time, professorial and graduate student effort, sporadic, uncoordinated and almost unfinanced.

We have found how little we know. The contrast with what industry and government have poured into research is appalling. But, considering the size of our investment, we've got a rather respectable mouse out of it.

For example, research reveals very little, if any, correlation between *rated* teacher success and intelligence or subject matter mastery or teacher age and experience or cultural background. Sex and marital status make no difference either. Socioeconomic level is related to teaching success only as those in the higher groups have more chance in making a try at it.

General college grades (but not those in particular courses) go along with teaching success* but don't cause it. They are related only as both depend on general intelligence. Teacher tests, whether of aptitude or achievement, whether local or national, reveal nothing about how well knowledge is or will be translated into classroom procedures. Maybe they will yet turn out to be good predictors, but so far they lack demonstrated relevance to performance.

Owing to the present inadequacies of criteria, testing instruments, and number of cases, such factors as empathy, general knowledge, and social adjustment are of indeterminate value. The same goes for "job interest."

Teacher training betters performance. What does count? Teacher attitude shows a small positive relationship in terms of pupil gain, but it is *only in professional knowledge* (i.e. years of study and *methods* courses) that we find "a sharp and undeniable relationship to teaching performance."

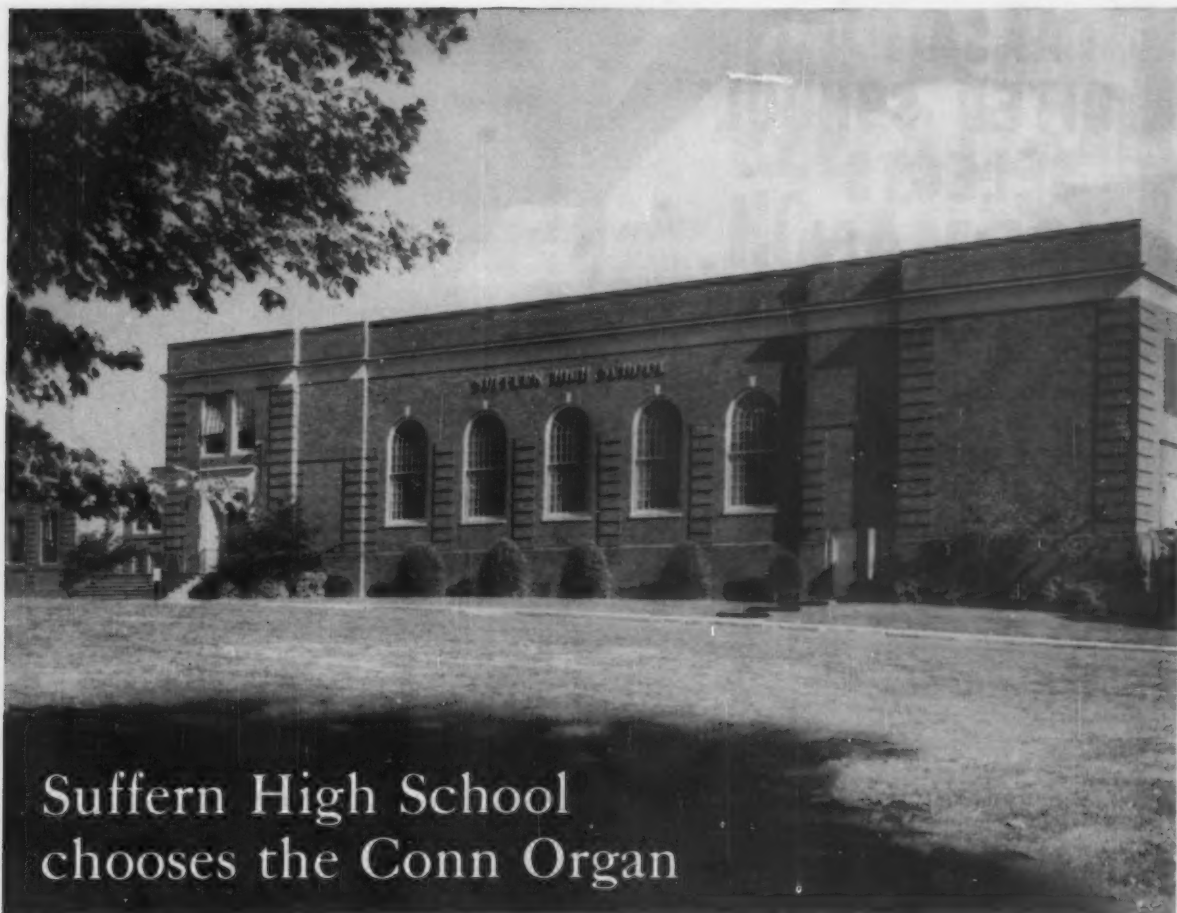
On the negative side, downright teacher failure is found to be linked to poor maintenance of discipline rather than to poor health, educational background, or knowledge of subject matter.

Our chance of predicting teacher success on the basis of commonly used factors seems none too good. Can we do better at evaluating and explaining teacher success when once we have found it? Our rating devices are too vague, pay too little heed to difference in teaching situations, and do not give enough attention to variability among raters. The items tend to be subjective and indefinite. Their variety betrays a lack of agreement as to the essential characteristics of the competent teacher.

For *their* purposes administrators and supervisors tend to rate teacher performance reliably, but the results show little relation to student gain. Except where traits are objectively observable, the ratings appear to exhibit halo effects.

Self-raters tend to overrate themselves. Colleagues, when you can get them to
(Continued on Page 28)

*Teaching success waxes in most of us for the first 5 years, sits on a plateau for the next 15 or 20, and then gradually wanes.



Suffern High School chooses the Conn Organ

*for musical and
styling beauty that lasts*

In this attractive school in Suffern, N.Y., you'll see a truly modern musical instrument... the magnificent Conn "Artist" Organ. It is also a very *practical* instrument, because it combines beauty of appearance and tone with solid construction that assures dependable service down through the years. The Conn is built of carefully-selected, top-grade hardwoods and the finest electronic components that stand up to the kind of everyday use to which a school instrument may be subjected. It is made by highly skilled technicians who are proud of Conn's tradition of 86 years' leadership in the manufacture of musical instruments. And the Conn has the versatility and tonal beauty that bring out the best in the most-talented artist. Choose from seven Conn models, from the "Caprice" to the "Classic," in a broad selection of styles and finishes. Priced from \$995. See the Conn line now. And ask your dealer to recommend the model and style for your school and budget.



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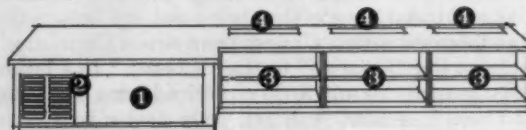
85¢ Per Sq. Ft. Total Installation Cost For Individual Classroom Heating and Ventilating Systems

Nationally honored by the American Association of School Administrators, the Northside Elementary School Addition in Morrilton, Arkansas is also an example of the way Norman Systems permit flexibility in design and economy in construction.

Every classroom in this all-modern addition has its own gas-fired warm air Norman System to assure room-wide comfort and a healthful pupil environment for maximum study and learning. No revamping of the existing heating method was needed. No tunnels, trenches of interconnecting network of ducts or pipes. The construction savings are obvious.

Norman automatically mixes fresh outside air with recir-

culated room air and uniformly distributes this conditioned air during occupied periods. Automatically conserves fuel nights and weekends. The operation and maintenance economies have been proved year after year in thousands of classrooms where Norman Schoolroom Heating and Ventilating Systems are already installed.



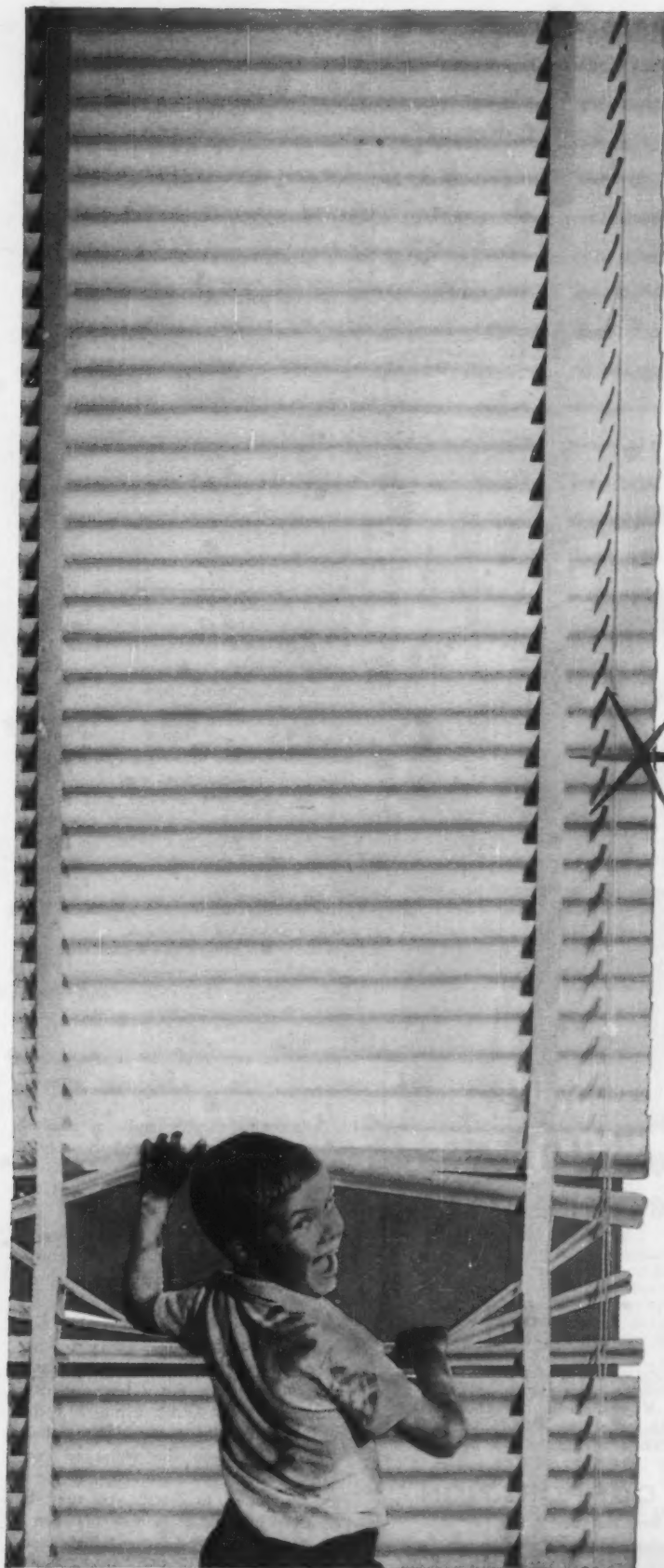
NORMAN HVS Model illustrating

1. Furnace Enclosure. 2. Return Air Grille. 3. Util-i-Duct® Bookshelf. 4. Air Diffuser. Also available in Inn-A-Wal Counter Flo Model for use in separate heater room.

For facts and figures, send for comprehensive Manual on Norman HVS Horizontal or Inn-A-Wal Counter Flow models.

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On the Shelf

(Continued From Page 24)

do it, rank (but don't rate) other teachers quite consistently. Pupils are consistent, too, in their judgments of their own teachers, but the effect of variables in the student's maturity, his liking for the subject, and his personal response to the teacher have not been tested by research. Self-rating tends to be overrating. It shows little relation to student gain or to the ratings of administrators.

In fact, systematic observation has found no single observable teacher act that is significantly correlated with student achievement. General patterns of

teacher behavior, however, like those outlined by David G. Ryans, show promise — if once they can be interfortified by specific descriptions of specific teacher acts.

Mr. Ryans marks off these three gamuts for further definition:

1. Understanding, friendly teacher behavior *versus* aloof, egocentric behavior.
2. Systematic, responsible, business-like behavior *versus* evading, unplanned, slipshod behavior.
3. Stimulating, imaginative behavior *versus* routine, dull behavior.

Obviously, a good deal can be learned from (1) examples of the extent to which teachers maintain rapport, disci-

pline and individualization of instruction consistent with pupils' needs and abilities, and (2) examples of student behavior — attentive listening, degree of conformity and initiative, and acceptance of the teacher.

Common sense may lead to nonsense. Come to think of it, don't you as an administrator rely on just such evidence, even on those days when you forget to bring your micrometer? Look out! You are warned again that "common sense" in forming judgments is no proper substitute for reliance on research studies that have been conceived in common sense and aseptically tested and statistically validated.

The role of the administrator (and presumably of his board of education) is to say what teaching values he seeks and then to give them priority.

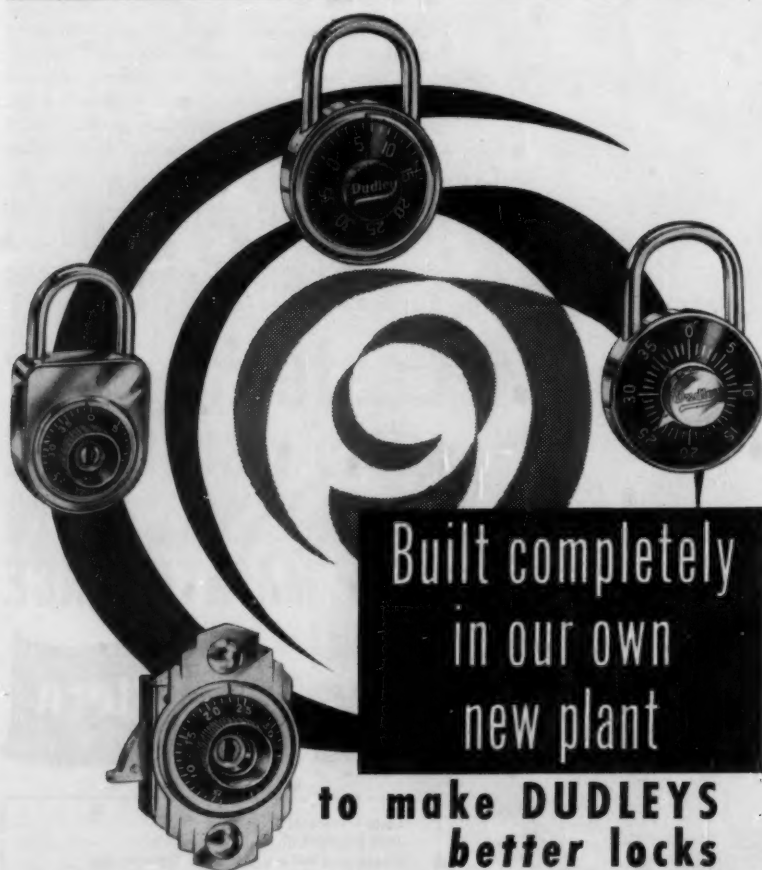
What do you value most? How have you and your community defined the teacher's job? Have you hoisted hushed classrooms, neat records, evenly drawn shades, and "dutiful" teachers to the top of your official totem pole? Do these conformist emblems, or something with a bit more yeast in it, suggest what you think teachers and education should be? The researcher must know your goals if he is to help you to know whether you are reaching them. You and your community must know and want them too.

More and more, and ever inevitably more, as world pace promises and threatens, you must know what is desirable and possible. Your best bet is to throw your weight, and Mrs. Busty's, into the support of your educational organizations in their drive for competent and massive educational research.

What already has been learned through educational research needs the further fourfold investment and effort that industry applies to new discoveries in testing them and translating them for the market. And, of course, there must be fresh, comprehensive attacks.

Since 1955 there have been important break-throughs in the study of teacher effectiveness and many well conceived and well organized programs by the American Educational Research Association, the American Psychological Society, Phi Delta Kappa, and others — notably by the three distinguished groups which in this booklet have focused on "Who's a Good Teacher?"

Is there one among you who asks what good it does to identify teacher effectiveness when, in order to keep classrooms staffed, every last applicant is hired anyway? Quiet, cynic. A better day is coming. New knowledge may help you to help even the worst of your teachers to improve. And should worse ever be added to worst, you may by that time be able to choose between a pony-tailed cadet and a ring-tailed teaching machine. ■



Built completely
in our own
new plant
to make DUDLEYS
better locks

Better service and better value than ever before are now enjoyed by users of Dudley Locker Combination Locks. Now, Dudley owns all dies, tools, jigs and production equipment and builds locks completely in a new modern, air conditioned plant, where every operation is carefully controlled by skilled Dudley people.

Whatever locks you need — built-in or padlock, revolving dial or revolving pointer, with or without

quick-change combination control — all can be master-keyed and master-charted.

For more than 40 years Dudley Locks have been the favorite locks of pupils, parents and school authorities.

Illustrated above, from bottom, S-540 Master-Keyed Built-In, P-570 Master-Keyed Padlock, RD-2 Padlock with revolving dial, RP-5 Padlock with revolving knob pointer.

DUDLEY LOCK CORPORATION

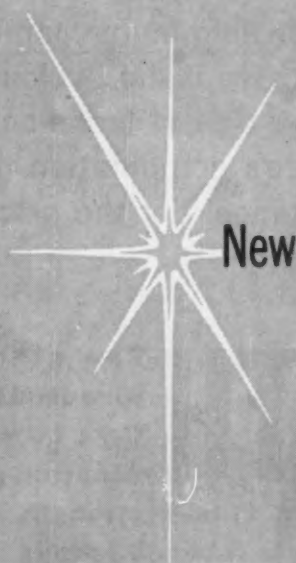
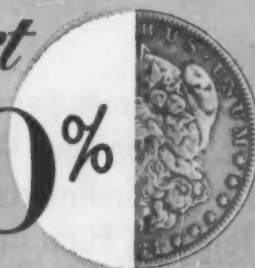
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Read about the most important development

A recent Cyclone Fence development promises to revolutionize industrial fencing throughout the United States. After years of vigorous research, and production line debugging, we are manufacturing an aluminum-coated steel fence of such high quality that we are willing to give it the Cyclone name. Nine years of field testing indicate that no other type of fence can economically match Cyclone Aluminum-Coated Fence's combination of corrosion resistance, tensile strength and heat resistance. Yet the price is only slightly above first-quality galvanized steel fence.

FIRE RESISTANCE

In a brush or debris fire, not uncommon along a fence line, temperatures can easily climb to the 1,300° mark. If the fence fabric melts, your property protection goes with it. The steel in Cyclone Aluminum-Coated Fence will not melt at temperatures below 2,850°. Repeated tests have shown that our aluminum-coated fabric can withstand temperatures as high as 1,650° and still retain its protective coating, and 2,000° for brief periods without the destruction of a single strand of wire.

STRENGTH

The steel wire used in Cyclone Aluminum-

Coated Fence has a minimum tensile strength of 80,000 psi, and that strength is retained as long as the coating remains intact. What does this strength mean to you? In actual tests, USS Cyclone Aluminum-Coated Fence was rammed by a car traveling at 35 mph. Not a single strand of wire was broken. ■ Buyers must not underestimate the necessity for strength in industrial fence. If you could "fence your fence" to protect it there would be no problems. But fence has to stand alone, and withstand vandals, side-swiping vehicles, and all sorts of mechanical abuse.

Protect it with  **CYCLONE**

in the history of property protection fence

CORROSION RESISTANCE **PRICE**

Our Research and Metallurgical people have found accelerated weathering and salt spray tests are misleading, therefore the following data is from actual service records: After 9 years of continuous exposure to a severe industrial atmosphere (Cleveland), Cyclone Aluminum-Coated Fence shows practically no deterioration. Even after 9 years of severe marine exposure, 90% of the surface was free of corrosion.

The normal market prices for USS Cyclone Aluminum-Coated Fence are only slightly above prices for galvanized chain link fence. And remember, for this very slight premium you're getting the combination of aluminum and steel that gives you superior corrosion resistance and long lasting strength.

KNOW THE BRAND

Cyclone is a brand name, not a type of fence. When you buy USS Cyclone you're getting a fence that's pre-engineered, prefabricated down to its smallest part. The Cyclone-developed H-Post is built like a steel beam for extra strength; Cyclone gates are sleeve-constructed—not welded—so they can be easily repaired; one-quality, full-weight fabric; deep-set post installations that don't skimp on concrete or steel, and professional installation by long-time Cyclone crewmen who know how to put up a fence to stay. ■ USS Cyclone has sales offices all over the country and a reputation built on the fact that Cyclone is the most widely used property protection fence in the world. Cyclone Fence is backed by the American Steel and Wire Division of United States Steel—a company that will be around tomorrow to live with what it sells today. ■ 69 CYCLONE BRANCH OFFICES. Cyclone has 69 branch offices throughout the country. Which means, wherever you are, we're reasonably close by. Give us a call next time you need fence around your company's property. Check your Yellow Pages under "Fence." For a brochure on new Cyclone Aluminum-Coated Fence, write American Steel and Wire, Rockefeller Building, Cleveland 13, Ohio.

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For safety, dependability, economy.



**American Steel and Wire
Division of
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1962 CHEVROLET SCHOOL BUS MODELS!

New High Torque power...new 66-passenger chassis...new safety and savings... plus proven Independent Front Suspension for the smoothest school bus ride ever!

Chevrolet's never been one to say "you can't improve on a good thing." Case in point: the '62 Chevy school bus models. With the introduction of Independent Front Suspension two years ago, Chevrolet developed the smoothest bus ride on the road and lengthened bus and tire life to boot. Now, for improved performance in '62, Chevrolet gives you a wider engine choice that lets you match the power team to the task. And with a choice of five school bus chassis—accommodating bus bodies from 30- to 66-passenger capacity—Chevy enables you to select the model that's *exactly* right for your community's needs. To insure maximum safety and dollar-saving durability, every school bus chassis comes equipped with sure-stopping brakes, extra frame strength plus plenty of power to pull capacity loads.

Let your nearby Chevrolet dealer prove to you why for safety's sake (and economy, too) a '62 Chevy school bus chassis is your best bus buy!

CHEVY'S HIGH TORQUE POWER PROVIDES NEW PEAKS IN PERFORMANCE! From the cost-chopping High Torque 235 Six (standard on Series S50) to the rugged High Torque 261 Six (standard on most S60 models and optional* on Series S50 models) . . . on up to the husky new High Torque 327 V8 (standard on S6902 and optional* on other S60 models)—every Chevrolet High Torque engine is built with heavy-duty components to insure long life and dependability. And each knows how to deliver top performance while keeping costs *down!* . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

*Optional at extra cost.

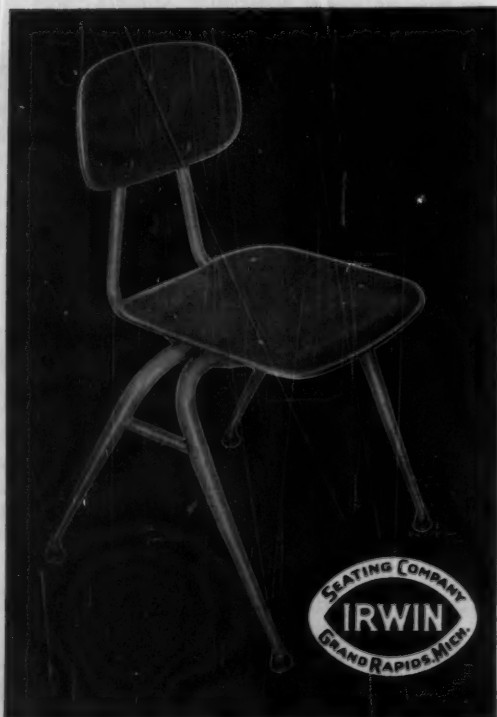
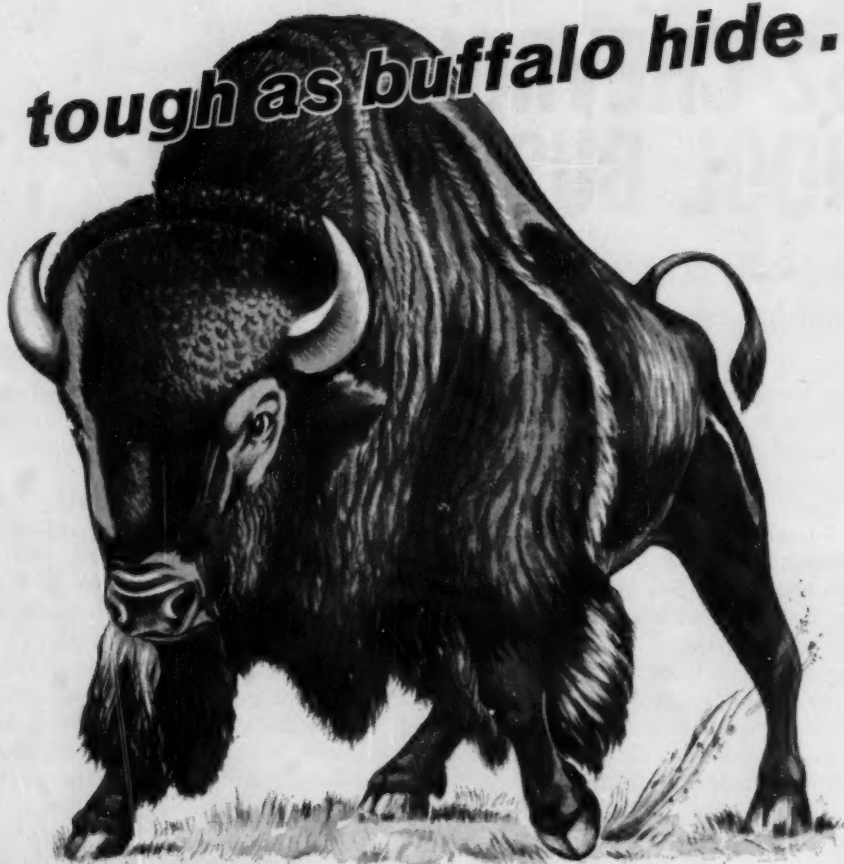
PICK THE SCHOOL BUS CHASSIS THAT SUITS YOUR PURPOSE AND POCKET!...	OR ONE OF THESE CHEVROLET MODELS THAT CONVERT FOR SPECIAL TRANSPORTATION:
 <p>30 to 36 Pupils Model S5302 Max. GVW 16,000 lbs.</p>	 <p>CORVAN Because of its low loading height, smooth ride and roomy interior, a specially converted Corvan is ideal for transporting handicapped children.</p>
 <p>42 to 48 Pupils Model S6202 Max. GVW 21,000 lbs.</p>	 <p>CARRYALL With special school modifications, there's room for up to 12 passengers plus the driver. Rear doors provide an easy emergency exit from the bus.</p>
 <p>48 to 54 Pupils Model S6402 Max. GVW 21,000 lbs.</p>	 <p>STEP-VAN High, wide and long inside, it can be converted to carry up to 20 children. Front school bus type doors provide easy entry and exit, double rear doors provide the emergency exit.</p>
 <p>54 to 60 Pupils Model S6702 Max. GVW 21,000 lbs.</p>	
 <p>60 to 66 Pupils Model S6902 Max. GVW 23,000 lbs.</p>	

CHEVROLET FOR '62



THE VALUE BUY IN SCHOOL TRANSPORTATION!

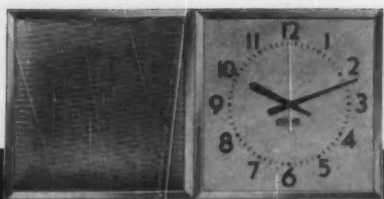
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Irwin *again* is first to offer a better classroom chair value—attractive, rugged vinyl on steel, set off by heavy anodized aluminum edging. This amazing combination of materials withstands the toughest punishment. New vinyl on steel resists scuffing, cracking and staining and is completely non-flammable. It is also abrasion-resistant, is easier to maintain, is more durable. Alumi-Guard, the finest idea in school seating today. Available in six striking colors and six seat heights.

IRWIN SEATING COMPANY
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COMBINE ALL ³
AND
SAVE \$1,000.00
OR
MORE



It's a fact! On the basis of a 20 classroom school (with gymnasium and auditorium), you'll realize savings of at least \$1,000.00 when you specify Practi-Call® by STANDARD.

The reason? Simply this: with Practi-Call, system components serve dual purposes. The bell control board, for example, functions both as a means of signal programming and as a telephone central. And installation savings are significant because all wiring is run in a *single conduit* to companion-mounted clock and speaker combinations. What's more, maintenance costs are lower, because service is from a single, reliable source—with no troublesome, divided responsibility.

Request more information on Practi-Call, the sensible, all-in-one communication system . . . "Functionalism without Frills".

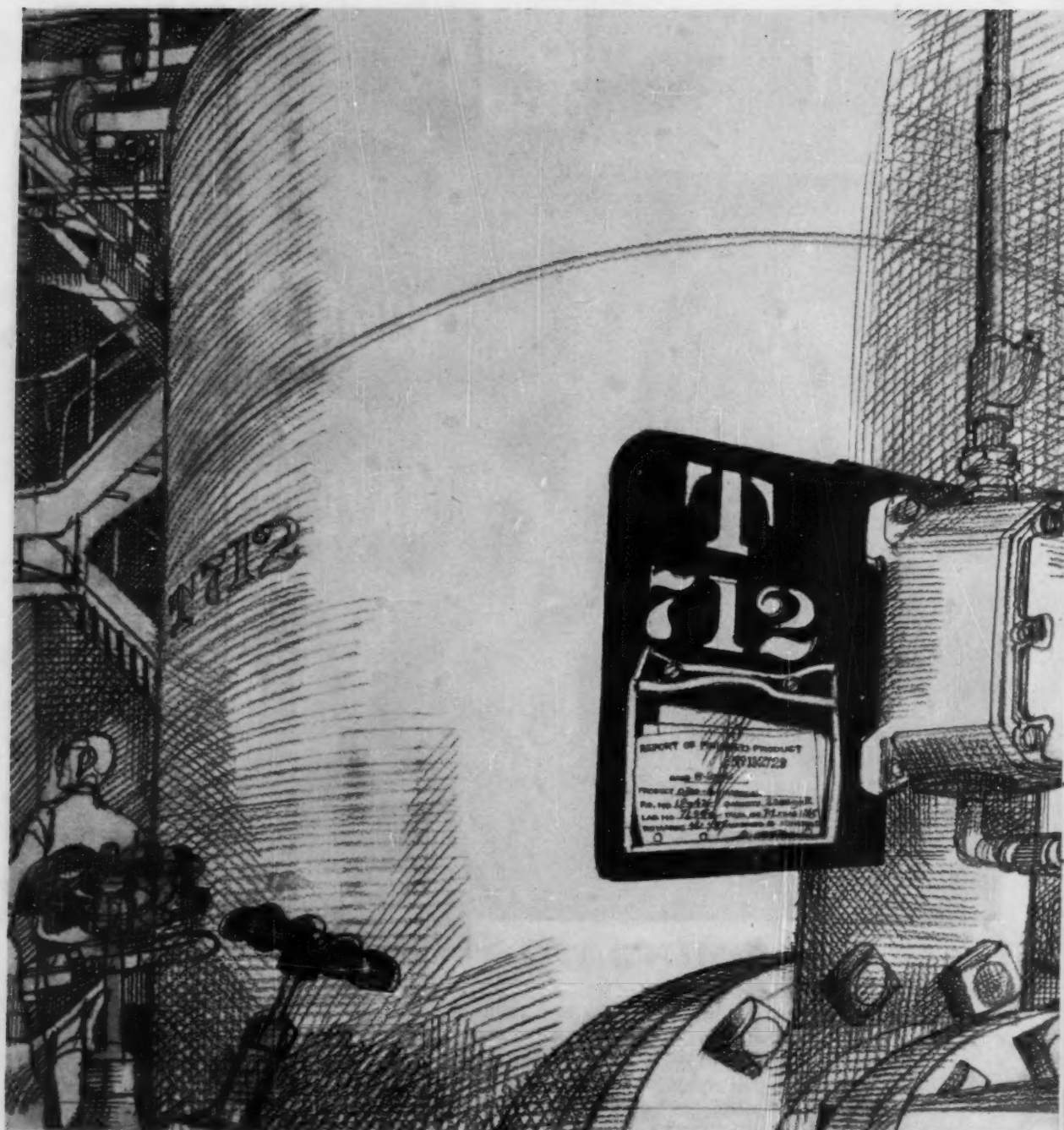


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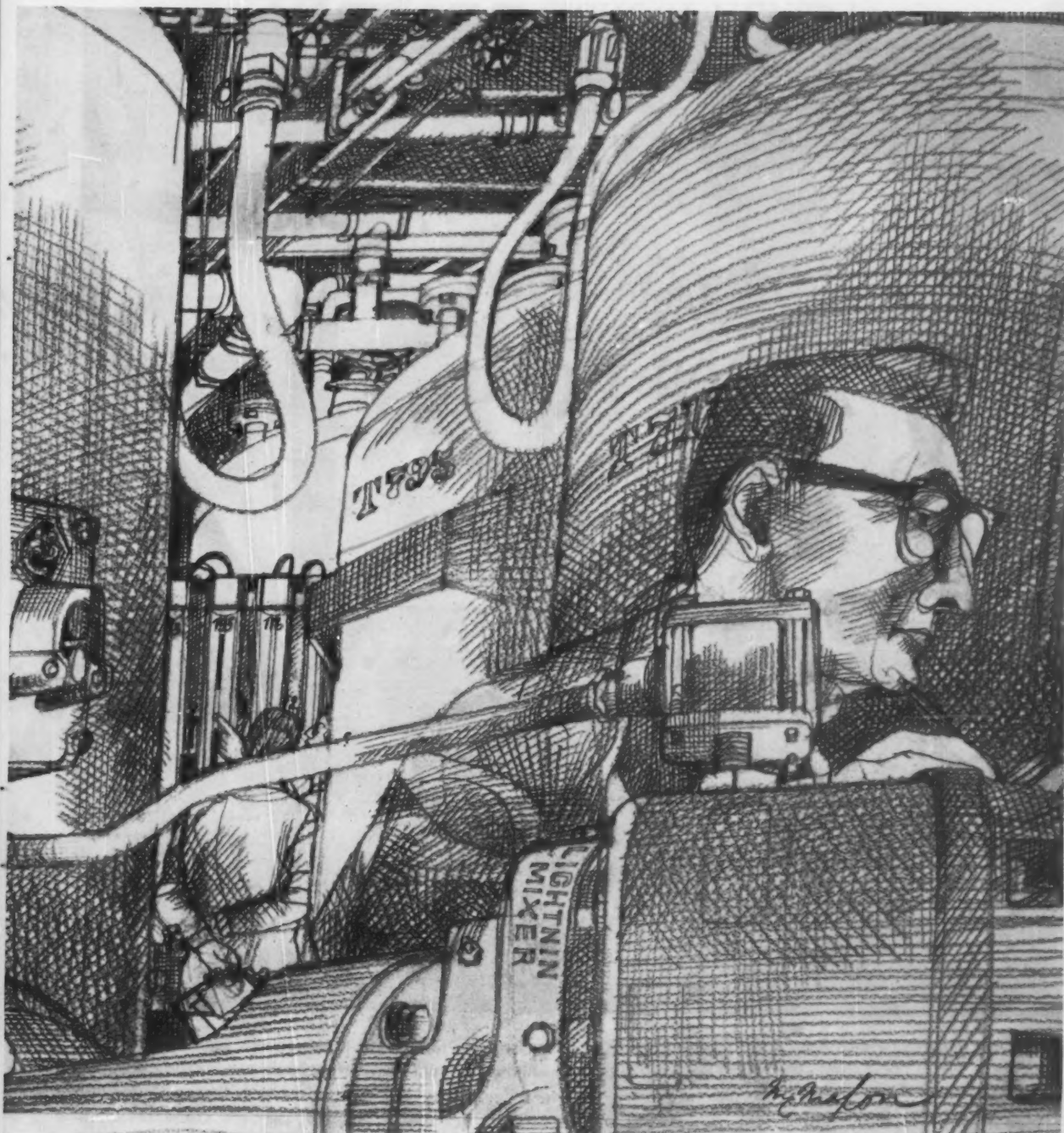
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This man's job is crime prevention. All day long he is on a stake-out, alert for the kind of crime that might do violence to the Johnson's products you depend on. ♦ He makes the final quality check on the floor finish and cleaners in Johnson's giant 8,000-gallon finishing tanks. ♦ Even at Johnson's Wax, mistakes can happen. Through human error. But they never get past this man and his laboratory crew. Instruments tell him the precise quality of every gallon we produce. A slight error in the chemical proportions of a tank of liquid cleaner? Solid content too low in a batch of floor finish? If anything is not within our rigid specifications, he



rejects it. That's how we protect you and how we protect ourselves. It is the reason we can guarantee every one of our products. ♦ Johnson's makes many heavy-duty products for building maintenance. For instance: WAXTRA!, a new combination of polymers and waxes that offers advantages neither could give you alone; and STEP-AHEAD, today's standard for quick-maintenance finishes; or FORWARD, the buffered all-purpose liquid cleaner that works so fast, so hard, so thoroughly. These and many others. All these products have one thing in common. They come to you as you expect them to. Always highest quality. Always exactly right. Every time.

**JOHNSON'S ♦ WAX...THE PEOPLE WHO TAKE A LONG HARD
LOOK AT YOUR MAINTENANCE PROBLEMS—AND SOLVE THEM**

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What a wonderful
Open World®
 today's students enjoy



ABOVE: Greenfield Elementary School, Detroit, Mich. Eberle M. Smith Associates, Inc., architects and engineers. In this building: L·O·F clear glass in windows facing court; Heat Absorbing Plate Glass in exterior windows facing south, east and west; TUF-FLEX® heat-tempered plate glass in side lights at entrances; PARALLEL-O-PLATE® glass in transoms at entrances.



Gone are the formidable, massive walls that threatened to swallow up children. Now schools are inviting, exciting to enter. Gone are dark, dreary hallways. Perimeter corridors are like bright sun porches. Gone are classrooms that "close in" on students. Now walls of glass let nature become part of the classrooms . . . an "open-world" environment where learning can be fun.

How pleasant for students. And how practical for taxpayers. Glass is a relatively low-cost construction material. And there's a kind of L·O·F glass for almost any need. Your architect can advise you which kind to use to solve special problems. Or ask your L·O·F Distributor or Dealer (listed under "Glass", in the Yellow Pages).

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The NATION'S SCHOOLS

Modine SCHOOL-VENT® heating,
cooling and ventilating unit... always the right
educational climate through unique test-proven

AIR CONTROL



TEACHER'S PET! And no wonder
... look at its report card

It's a pleasure to learn—and to teach—in a classroom equipped with Modine's SCHOOL-VENT. It heats (or cools), ventilates and filters... automatically maintains comfort and health requirements at levels consistent with the highest standards for maximum learning efficiency.

In addition to the high degree of controlled thermal environment afforded, SCHOOL-VENT merits "highest grade" in styling. Modern, distinctive lines (designed by Jean Otis Reinecke) make it an attractive addition to any classroom. And it's available in seven attractive colors: light gray, tan beige, light green, coral red, light blue, dark gray, or cream yellow.

Modine's SCHOOL-VENT heats with steam or hot water... cools with central-source chilled water. It's available in five sizes... ranging from 500 to 1500 cfm. If budget limitations do not permit the installation of an all-season system, SCHOOL-VENT may be installed for heating and ventilating only. Cooling may be added at any time by merely installing a cooling coil.

- install for heating... add cooling later, anytime
- built-in, test-proven damper system automatically regulates amount of recirculated and fresh air to maintain desired room comfort conditions
- single-station, pushbutton metered system distributes lubricant under pressure to all oiling points
- filter can be removed and replaced in seconds without removing panels or screws
- anti-wipe damper completely shuts off heat pick-up from coil... eliminates need for coil valve
- vibrationless, whisper-quiet
- unique damper design prevents "blow through" of outside air which can cause chilling drafts
- generous end compartments for housing even the most complex control systems
- student-proof, heavily reinforced, welded steel cabinets defy abuse
- can be used with Modine finned tube radiation for downdraft protection when installed along broad expanses of window wall

YES NO

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Compare the advantages of

SCHOOL-VENT'S AIR CONTROL

test-proven full-damper system

Unlike other heating and ventilating units, SCHOOL-VENT does not depend upon control valves to modulate the flow of steam or hot water. *Positive* regulation of comfort is achieved by means of *complete air control* provided by a unique test-proven full-damper system: (1) a face-and-by-pass damper directs air through and around the heating coil according to comfort requirements; (2) an anti-wipe damper permits *complete* isolation of the coil, eliminating heat pick-up from the coil; (3) indoor and outdoor dampers assure proper blend of fresh and recirculated air.

There is *no delay* between comfort demand and comfort delivery. The dampers are constantly "alert" to changes in classroom temperature and fresh-air requirements . . . adjust automatically to maintain the best possible comfort level.

AFTER-HOURS ECONOMY! Over-night or during other periods of un-occupancy, SCHOOL-VENT heats primarily by convection. Face-and-bypass (A) and anti-wipe (B) damper are open. Fan starts only when temperature drops below predetermined setting . . . cycles a few times nightly. Indoor damper (D) is open, outdoor damper (C) closed for maximum economy.



MODINE'S SCHOOL-VENT PROVIDES PRECISE INDIVIDUAL ROOM

CLASSROOM COMFORT! During morning warmup (prior to occupancy), dampers remain in night-time positions and room air is recirculated for maximum heat gain. When room is occupied, outdoor damper (C) opens to blend proper amount of fresh air with room air. At the same time, face-and-bypass (A) and anti-wipe (B) dampers automatically adjust to maintain desired room temperature.



CONTROL OF TEMPERATURE AND FRESH-AIR REQUIREMENTS

FULL VENTILATION — When room temperature continues to rise due to solar heat gain and body heat of occupants, fresh-air damper (C) and recirculation-air damper (D) modulate to increase the proportion of outside air . . . up to 100% if required. During full ventilation, face-and-bypass (A) and anti-wipe (B) dampers are closed so that fresh air completely bypasses the coil.



MODINE MANUFACTURING COMPANY

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Please send SCHOOL-VENT Bulletin 1261 ☐; also data on Modine's other school comfort equipment ☐.

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Modine SCHOOL-VENT



SCHOOL-VENT BULLETIN 1261 contains feature and specification data. The coupon will send your copy on its way. And for information on other Modine comfort equipment for schools, simply check both boxes in the coupon.

New Perspectives for the Administrator

DOES the school administrator actually know *why* he is successful — or unsuccessful?

Can he look back over his years of training and experience and identify the "learning" that has been most useful to him?

The factors that make for success in school administration become of even greater importance as the time approaches for the A.A.S.A. professional standard — six years of training at the college level — to become effective.

Anticipating that the preparation of the school administrator must be *upgraded*, representatives of 43 institutions comprising the University Council for Educational Administration met in Chicago, October 16 to 18, for a three-day conference to seek "new perspectives for training administrators."

It may be literally true that the 95 participants raised more questions than answers, but perhaps that is as it should be, because the purpose of this group thinking was entirely exploratory. There was a broad range of opinions on such questions as: Is experience as a teacher an essential prerequisite for success as a school administrator? Is administration of a public service essentially the same for schools, public health, and municipalities? Or is public school administration a profession in and of itself for which the preparation should be unique and specific?

BEGIN WITH CRYSTAL GAZING

Chicago's general superintendent, Benjamin C. Willis, suggests that the first step in planning the preparation of a school administrator is to picture the kind of world in which the school and its superintendent will be operating in the years to come. A study of the problems and issues of society itself for the next three decades may offer clues to the kind of preparation that will be needed by the school administrator. However, "study" does not include indoctrination for "pat" answers.

"Today's answers," he says, "will not apply to tomorrow's problems, so we must find ways to develop critical mental qualities and individual characteristics which will serve our people in circumstances we cannot now even predict."

Dr. Willis was the only public school superintendent on the team of eight speakers at the conference. More than any of the other speakers, he stressed the urgency of inservice or continuing education for those now holding responsible administrative positions. He reasoned that "most of the major administrative posts in

American education for the next 10 or 15 years at least will be held by persons who have completed their formal program of education and who must learn in a variety of ways to cope with the problems they now face."

This is a situation that will be just as true 15 years from now. Then, as now, there will be the dual challenge of preparing administrators for the future and of meeting the needs of those now on the job.

WORLD FACES TWO GREAT ANXIETIES

The two greatest anxieties in the world of tomorrow will be those that face us now — physical survival and ideological survival — believes the Chicago superintendent. Since our problems will be international, our contacts and our understandings must be international. Therefore, Dr. Willis reasons that the school administrator of tomorrow "must become intimately acquainted with foreign cultures. . . . Foreign travel should be considered an integral part of the superintendent's professional responsibilities. This must, of course, be more than a sightseeing tour. . . . It must involve sitting with educational leaders from other countries in serious discussion of common and unique educational problems."

Other problems of today will still be with us, such as "the dropouts, the talented youngsters who do not get to college for one reason or another, and the children who are denied adequate educational opportunities because of race or living in one section of the country rather than another."

We can expect greater challenges from science and technology. Dr. Willis comments: "The sciences which have provided us with polio vaccine and transistors and space capsules have also given us technological unemployment and the capability for self-extermination. . . . To combat technological unemployment, we need expensive retraining programs for adults. To prevent its extension, we need basic technical training for increasing numbers of our young people. Above all, we must transmit a knowledge of history, an appreciation of art and literature, and the psychological insights which enable men to control not only their machines but themselves."

SOCIAL PROBLEMS MORE COMPLEX

Other social developments will increase in complexity and in their impact upon public education, says Dr. Willis. One of these is the "urbanization of the country" and the related "metropolitan complexes." The

superintendent of tomorrow must be aware "of the problems created by the mobility of our people, of the forces which create or encourage delinquency, and of the relationships between urban and suburban areas that are bound together in these complexes."

There are things that we can and should do *now*, believes Dr. Willis. One of these is to establish "some long-range planning for continual involvement of all of us in dealing with the problems we are now facing." He writes: "I'd like to see an effort made toward isolating some of these broad social and economic issues that trouble our teachers and administrators. . . . If we could have, perhaps on a regional basis, a series of week-long work sessions involving school administrators, representatives from the offices of the mayors and city managers, representatives from other governmental bodies concerned with these issues, and persons from universities who have given some time and energy to studying these issues, we might be able to move faster toward some solution."

Incidentally, Dr. Willis thinks that most summer workshops and conferences conducted for the inservice education of the administrator are "notable for their lack of creativity and for sterility of concepts." Furthermore, he does not think that inservice opportunities for administrators should be only a summer activity. For some superintendents, July and August are among the busiest periods of the year.

And Dr. Willis concludes: "In the final analysis inservice is an individual matter requiring individual motivation. . . . I suspect we need to build into our professional careers some conscious, long-range efforts toward professional growth rather than assuming that this is something to be added on, outside the scope of normal affairs. This may require us to do some convincing of school board members of the value of such activity if we are thinking of more than sporadic efforts in this direction."

PART OF A BROADER ENVIRONMENT

"The political institution of public school education, . . . with its traditions and structural pattern, cannot be isolated from a broader environment of social, economic and political process." This advice by John D. Millett, president, Miami University, Oxford, Ohio, and president of the American Society for Public Administration, expressed a conviction that others at the conference apparently shared. Said Dr. Millett: "I would suggest that it is this interrelationship of institutions and process which constitutes in particular a *new frontier* of exploration for the school administrator."

President Millett believes that "the problem of school leadership is emerging in a new setting. Parents and public reserve the privilege of criticism while becoming farther and farther removed from an understanding of learning goals and procedures."

Pertinent to the preparation of a school administrator, in Dr. Millett's opinion, is that he comprehend four points of view. He explains: "Leadership in a social context and in a framework of political institutions is only a part of the challenge to school administration. The professional administrator must understand and master the process of administration itself. He must see

this in terms of a structure of organization, of a system of interpersonal behavior, of a process of management, and of a procedure for decision making."

A PLAN TO PREPARE LEADERS

Another of the eight speakers who foresees "a new setting" within which the public school administrator will operate is Theodore L. Reller, professor of education, University of California, Berkeley. The school administrator in the forthcoming society "will have need for knowledges and competencies well beyond (different from) those generally sought in the educational administrator heretofore," believes Dr. Reller. He anticipates that the superintendent's job will be a highly selective one, primarily because there will be fewer school districts. "The approximately 40,000 districts in the nation may well be reduced to 5000 in a couple of decades," he predicts. "The districts which remain will be large ones, both geographically and in population." In the new setting, "education will be more closely coordinated or integrated with other services, such as public health, housing, social welfare, land use, recreation, employment and assistance for youth, and library."

Dr. Reller foresees much improvement in the quality and scope of public education and in the equality of educational opportunities. He believes that "the teaching staff . . . will achieve higher levels of competence and through its organizations will have a larger role in the development of educational policies. . . . The social status of the teacher . . . will improve sharply because of an awareness of the growing dependence of the society upon education." Specifically, he prophesies that "boards of education will seek men who have done significant research for appointment as chief administrators and, whether successful or not in that research, will insist upon their chief administrator's having high competence in the design and conduct of research."

(Continued on Page 80)

Jack Benny's Mistake

THE greatest honor that has ever happened to me or ever could happen to me! This, in essence, was Jack Benny's statement of appreciation for the fact that the school district of Waukegan, Ill., has named its new junior high school after him. According to *Who's Who in America*, Jack Benny was born in Waukegan, Feb. 14, 1894, the son of Meyer and Emma Kubelsky. He attended the public schools in Waukegan.

The Sunday evening television network program that Mr. Benny prerecorded on the stage of the new school, when he was there for its dedication, was in good taste except for one thing. Mr. Benny permitted his sponsors to use the glee club of the junior high school to sing a commercial for the program. Mr. Benny should know that this comes under the heading of "exploiting a school activity for commercial purposes."

The Editor

THE HOW AND THE WHY OF THE 'MIDDLE' SCHOOLS

The reasons for the "middle school" are not simple. They consist of a complex, interrelated series of observations and studies. In an application of these reasons to the needs of a new-

ly created school district, two new "middle" schools

have been built and are in operation in Saginaw Township Community School District, adjacent to Saginaw, Mich.

For some time the junior high school concept has been under scrutiny. Many educators believe that while the theory of the junior high school is excellent, in practice it has resulted in junior high schools becoming miniature senior high schools, with the social activities, the athletic programs, and the instructional programs of the senior high school moving into the lower educational level. To some it has been apparent that this movement downward of the patterns of the senior high school has not solved the problem of educating boys and girls at lower age levels. Rather, it has multiplied and intensified the problems of their normal growth and development.

There are those who advocate that the perfect school would be that in which all students, kindergarten through the 12th grade, are present. This theory has obvious merit. Nonetheless, it has certain obstacles. Most school communities must break the 13 year sequence in terms of their ability to finance school facilities in the face of exploding populations. *(Text Continued on Page 45)*

PUT 5th TO 8th GRADERS IN A SEPARATE SCHOOL? WHY? HOW MUCH WILL IT COST?

By **GEORGE E. MILLS**



All photos in this story and on cover are by Bradford-LaRiviere, Inc.

UNCLUTTERED environment of Chippewa Middle School with open areas and plenty of work space is in contrast to conventional classroom scheme. Raised mall (above) runs lengthwise through Grade 5 "house." Classrooms are at left and right. Mall incorporates work center, sinks, storage space, toilets. Note movable science equipment in foreground.

FROM CLASSROOM, mall is viewed (facing page) as a demonstration area. Here a science experiment is being conducted. Phone on wall at right is part of school's far-flung intercommunication system. Mall also serves conveniently as a ready stage for planned or impromptu pupil productions.

SCHOOLHOUSE PLANNING



Theory: Grades 5 to 8 do better in a separate 'middle' school;

Fact: Over-all cost is lower than for many conventional plants

As we studied the 320 physical, mental, emotional and social growth characteristics and teaching implications for boys and girls, from kindergarten through the 12th grade, we concluded that there were centers of similarity in this 13 year span that merited close study. We observed that the kindergarten youngster and the first, second, third and fourth grade youngsters had more of these growth characteristics in common. We noted further that the growth characteristics of boys and girls at the age levels represented in the fifth, sixth, seventh and eighth grades also had great areas of similarity. We felt, too, that the age level represented by the ninth, tenth, eleventh and twelfth graders in terms of those growth characteristics had large areas of similarity.

In addition, there were strong indications from the Edsel Ford Foundation Curriculum Study in Dearborn that the four-year high school (since tradition forces these four years to be considered for college entrance) ought to be under one hat or in one institution, rather than having the ninth grade in a separate institution. These conclusions led us to establish the *primary school*, which includes

kindergarten through Grade 4, the *middle school* with Grades 5 through 8, and the *four-year high school* with Grades 9 through 12.

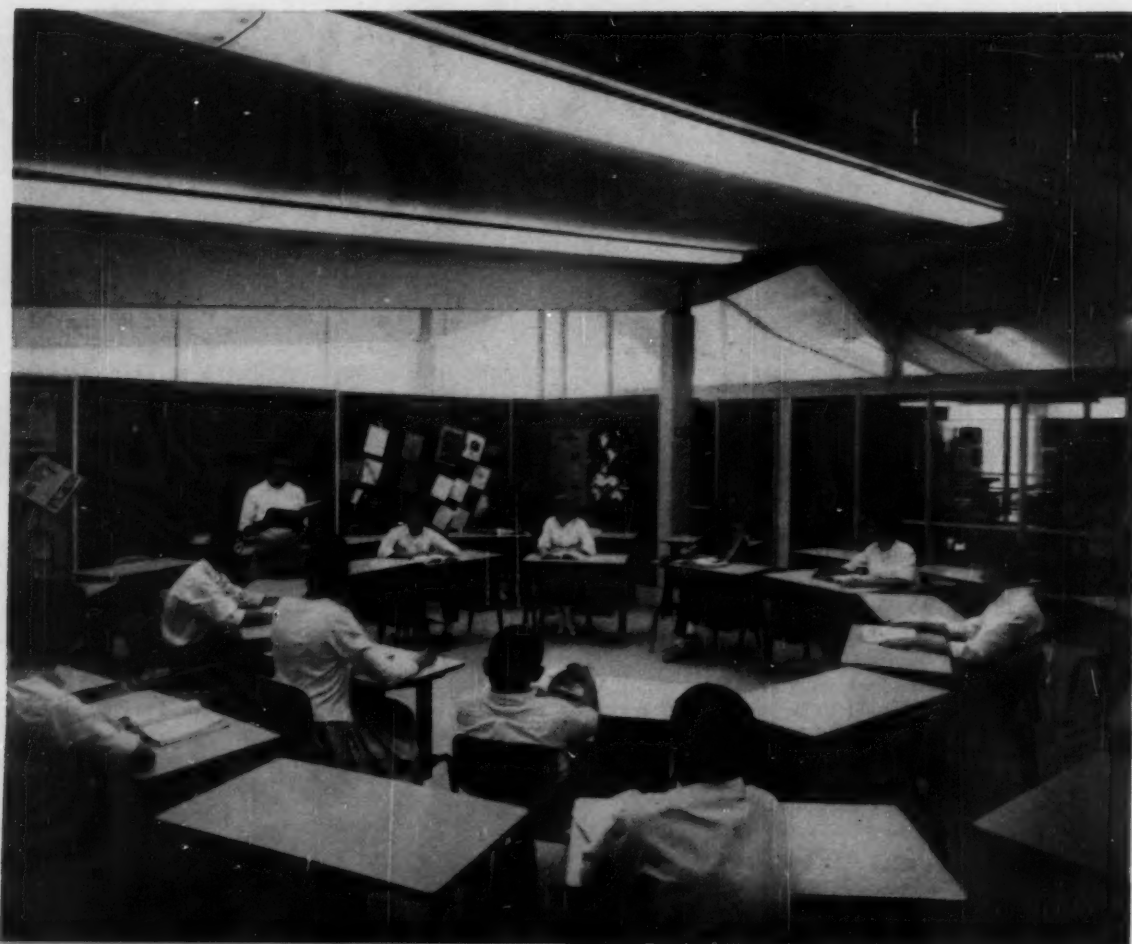
We are convinced that a school society and environment for boys and girls at the middle school level of growth can be managed better in terms of their development than at any other breaking point in the 13 years of their school experience. This is the kind of school society in which dating, dinner dances, and so forth are not considered appropriate experiences.

We believe that the *primary* schools should be devoted to the development of basic skills and the extension of interests and appreciations. The *middle school* also must be concerned with the development of basic skills but, equally important, with the reinforcement and extension of those basic skills through their application in meaningful situations where students have the opportunity to become increasingly *self-directing*.

The *primary* schools are considered neighborhood schools, where boys and girls from a given community area assemble for the purpose of learning. The middle school is the kind of situation in which sev-

CHALK AND TACK BOARDS cover
"teaching walls" in self-contained
Grade 5 (right) at Mackinaw.

MOVABLE FURNITURE is used in
Grade 7 room (below) at
Chippewa. Mall, behind glass,
is not raised in this "house."
Small study rooms (also beyond
glass) are located on mall.





Facilities for each grade are tailored to pupil size, need and growth pattern

DINING ROOM at Chippewa (centralized) Middle School (left) is reproduced in color on this month's cover. . . . **ARTIFICIAL LIGHTING** is used in dining room (not "cafeteria," pupils will have you know) at Mackinaw (below) to create feeling of warmth and airiness. Both dining rooms have booths and round tables where small pupil groups can meet, eat and chat. Facilities in both are designed to feed two groups in each of two 60 minute periods. Dining rooms are "where we practice being ladies and gentlemen," says one pupil.

eral of these primary communities come together for the expansion of the learning environment, the rubbing of shoulders with peer groups from other neighborhood communities, and the stimulation of an expanding world. This is a part of the "growing up process" — the moving into the larger "environment."

In the middle schools, the fifth and sixth grade youngsters are in self-contained classrooms, but there is a significant difference, best illustrated by the fact that the fifth grade classroom is a different kind of physical facility than the fourth grade classroom. The sixth grade classroom is different from the fifth grade classroom, and the seventh and eighth grade classrooms are different kinds of physical facilities than the fifth and sixth grade classrooms. (See chart on page 72.)

Whereas in the primary school the classroom unit is largely self-sufficient and unrelated to other similar classroom units, in the fifth grade classroom in the middle school the pupil activities are related to those in the other classes in the fifth grade "house." This concept is broadened in the sixth grade "house," and is broadened still further in the seventh and eighth grade "house."

The *physical facilities* in terms of building and





How the middle school puts new theory into observable operation

equipment as well as *program* are tailored for a particular grade level.

As these pupils move through the middle school, in terms of the fifth and sixth grade "houses," and in terms of the seventh and eighth grade block-of-time programs, they retain a "home base" which diminishes as they move through these grade levels, and as their specialized interests areas develop correspondingly and are stimulated. Thus this "school for growing up" really consists of three transition schools, each one leading the pupil on to a deeper and wider learning environment.

The Saginaw Township Community School Concept. The new Saginaw Township Community School District presented these exciting challenges and opportunities: (1) to consolidate the existing educational programs of five separate primary school districts into one program, making the improvements that such an opportunity afforded; (2) to develop new instructional programs for children in Grades 7 through 12, who previous to this time had been attending the Saginaw city schools; (3) to build new buildings (to house an exploding enrollment) that would be of maximum educational use and for a reasonable cost, and (4) to acquire a new staff of teachers — a staff which would be interested in and enthusiastic about the kinds of opportunities and the kinds of challenges that have just been mentioned.

Beyond these challenges was an overwhelming desire on the part of the first (and new) board of education and the first (and new) superintendent to build a school system in a community which presently ranked as one of the wealthier school communities in the state. But when the full 12 grades were housed within the school district, an average tax base (for the state of Michigan) for each student would then be established.

The total staff launched a massive inservice education program. For a short three months, utilizing large amounts of "released time from school," after-school and Saturday meetings, the total staff studied the various systems of educational philosophy, ranging from Dewey to Adler. An intensive look was taken at the various schools of educational psychology, theories of learning, and theory of personality development. Also studied intensively were the nature of society today, characteristics of our community, and the characteristics of boys and girls in terms of their emotional, intellectual, social and



PHYSICAL FITNESS is first aim of physical education program at Chippewa (above) and Mackinaw. Emphasis is on intramural, not interschool, athletics. Note stages, enabling both gyms to double as auditoriums. Mackinaw (below) uses only a railing to separate sunken gym from corridor at left.



UNIFIED ARTS AREA (wide-angle camera lens makes room appear as though set in curve) comprises three rooms with mall as common work area

(foreground). Program consists of homemaking, arts and crafts, and industrial arts. Fifty pupils make up two classes and are assigned to three teachers.



Decentralized middle school cost about 3 per cent

physical development. Out of this matrix of activity, the staff, together with the board of education and subsequent involvement of the community, established three major purposes for education in our community.

The first major purpose was to develop within the pupils a system of values for citizenship in our democratic society. It was felt that with the tremendous change in all aspects of our way of life, the one thing that must be done for and with boys and girls is to help them achieve a set of ethical values, mores and standards by which to face the changing world — and to face this changing world successfully and securely.

The second major purpose was the well known one of developing the ability to think clearly and objectively. This objective or purpose should need no further explanation.

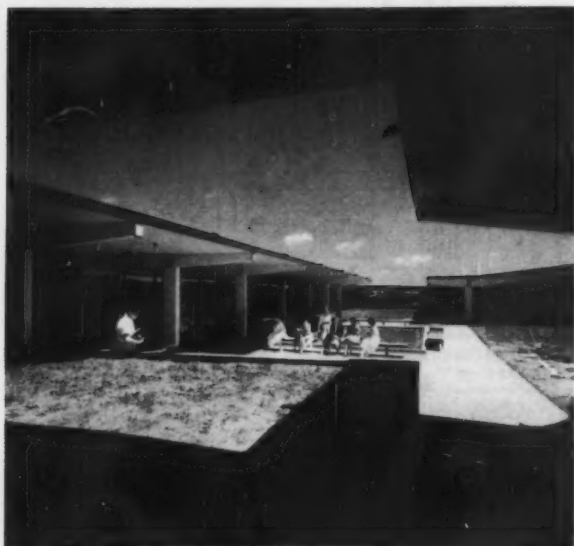
The third major purpose was to develop mature, self-actuating individuals who are competent, self-sufficient, cooperative and who find satisfaction in giving as well as in receiving.

Supporting these three major purposes, the staff, the board of education, and the community agreed upon 24 general statements of specific purposes which support the three major purposes. Here are five examples:

1. To encourage respect for the dignity and worth of each person and to treat him accordingly.
2. To help each individual understand himself and his unique potentialities for leadership as well as for "followership," and to help him understand the contribution of each role to himself and his society.
3. To help each individual attain competence with the basic skills of reading, writing, spelling, speaking and the use of numbers.
4. To accept and encourage each person's spark of constructive creativity.
5. To provide children with experiences in democratic living and learning, which include experiences with the exercise of authority that originates sometimes outside the classroom, sometimes with the teacher, and whenever possible with a group.

What kind of educational arrangements could be

COURT at Mackinaw has "social" space for pupil gathering. Library, gym and administrative offices are at left. Note covered walkway, center.



more than centralized

made in terms of buildings, in terms of program, in terms of instructional materials, in terms of learning experiences that would develop these 24 specific objectives that supported the overarching three major purposes? This was the task.

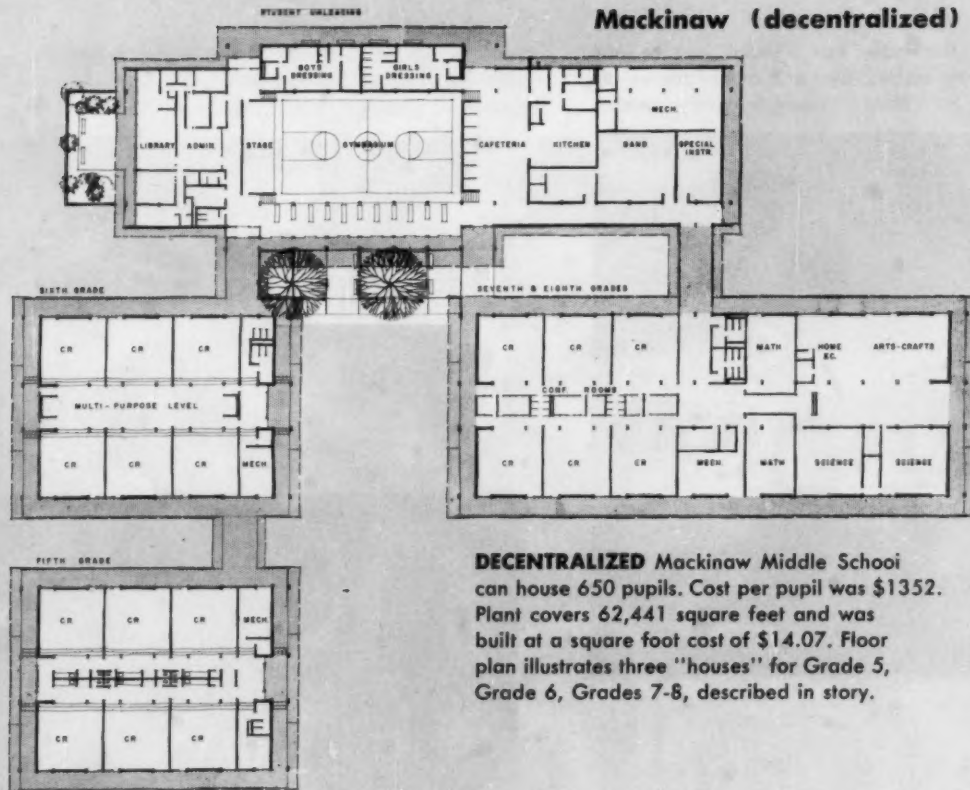
Designing the School Plant. The board of education and the school administration conducted a nationwide search for an architectural firm to design the two new middle schools and the first of two new high schools — now named the Douglas MacArthur High School. This intensive search resulted in their selecting the firm of Caudell, Rowlett and Scott of Houston, Tex., as the prime architect, to design three new school buildings and to develop a long-range school site study for this new school district. Two local associate architects were appointed.

Daniel W. Toshach was chosen as the associate architect for the Chippewa Middle School (the centralized school) and Spears and Prine as the associate architects for the Mackinaw Middle School (the decentralized school). These architectural firms were handed the education specifications for the



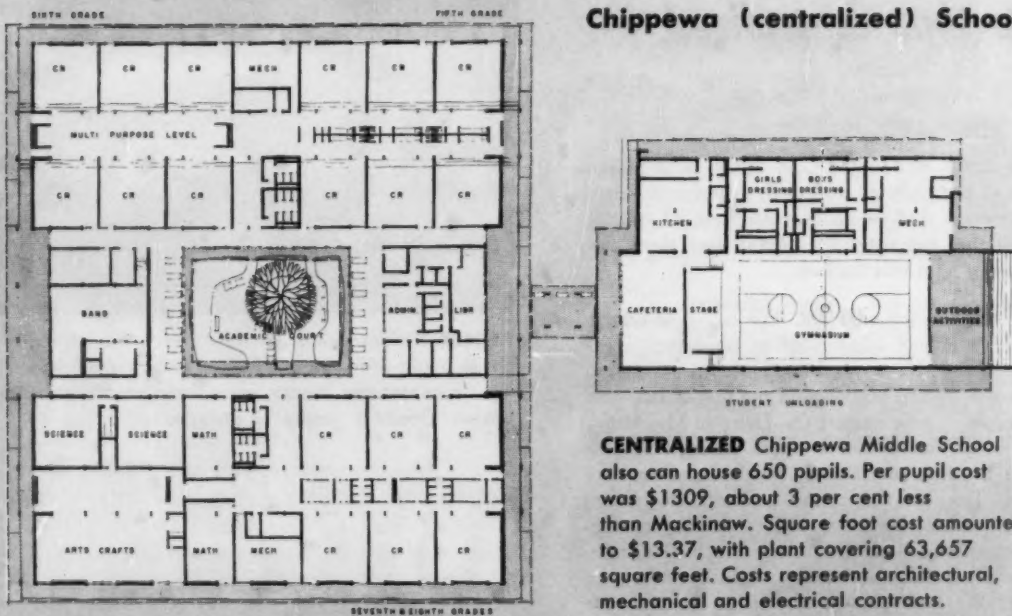
POND at Mackinaw is shallow and is used for drainage. Small pump prevents stagnation. Grade 7-8 "house" is at left. In center are library, administrative offices, and gymnasium. Grade 6 "house" is at right.

Mackinaw (decentralized) School



DECENTRALIZED Mackinaw Middle School can house 650 pupils. Cost per pupil was \$1352. Plant covers 62,441 square feet and was built at a square foot cost of \$14.07. Floor plan illustrates three "houses" for Grade 5, Grade 6, Grades 7-8, described in story.

Chippewa (centralized) School



CENTRALIZED Chippewa Middle School also can house 650 pupils. Per pupil cost was \$1309, about 3 per cent less than Mackinaw. Square foot cost amounted to \$13.37, with plant covering 63,657 square feet. Costs represent architectural, mechanical and electrical contracts.

Architects: Caudill, Rowlett & Scott, Houston, Tex.
Associate architects
(for Mackinaw): Spears & Prine, Saginaw, Mich.
(for Chippewa): Daniel W. Toshach, Saginaw, Mich.

Average cost per pupil was \$1335

Middle School in September 1959, and the schools were in use the following year.

To dictate an architectural style is to restrict the creativeness of the architect. It would seem that each building should present a significant architecture — where the day-to-day awareness of the building, its vistas, its genius, its beauty and imagination would develop in the student body and the community a sensitivity to, and an education in, architecture.

In addition to program needs, the architects were instructed to spend money for school facilities in those areas of the school in which the pupils would spend most of their time — the classroom instructional areas.

The decision was made to build a centralized and a decentralized school with identical facilities so that the actual cost of each might be known. But more important, since many more schools would be built in the community during the next 20 years, data as to which is the better educational plant would be available to successive boards of education and school administrations.

Each middle school can house 650 pupils at optimum. The cost per pupil for the decentralized school was \$1352; the cost for the centralized school was \$1309. The total area per school is as follows: 62,441 square feet in the decentralized school, and 63,657 square feet in the centralized. The square foot cost in the decentralized school was \$14.07, and in the centralized school, \$13.37. These are costs as computed by A.I.A. formula and represent the architectural, mechanical and electrical contracts.

In both schools, the fifth grade classrooms are built three to a side along a raised mall which houses sinks, storage space, and toilet facilities. The sixth grade classrooms are built three to a side along a raised mall, which is used as a large group instruction space. Each house, whether fifth or sixth grade, has storage space for science tables, handicraft tables, science equipment, and so forth. The sixth grade house uses gang toilets.

The three seventh grade block-of-time classrooms face the three eighth grade block-of-time classrooms. Between these classrooms is a series of various sized conference rooms and individual study carrels. The remainder of the seventh and eighth grade building consists of two mathematics classrooms, two science classrooms, and the unified arts area, consisting of three distinct areas and a large space for common use.

While the centralized building and the decentralized facility contain administrative offices, a teachers lounge, conference rooms, the instructional materials center, dining room, and the gym-auditorium space, they are arranged differently in each of the two plans. However, the spaces are virtually identical.

(Continued on Page 72)

ABOUT THE AUTHOR

GEORGE E. MILLS has been the first superintendent of the Saginaw Township Community schools. He took office in March 1959. The district is a consolidation of five districts along the southern and western perimeters of the city of Saginaw. It brought together diverse elements of rural areas and well developed suburban residential territory, representing a total area of 25 square miles and a school population at that time of 1859. In two years the school population has grown to 3196, with a projected 1965 enrollment of 6644.

Mr. Mills came to Saginaw Township from Dearborn, Mich., where for nine years he was assistant superintendent in charge of senior high schools and the Henry Ford Community College. This was a new position within the Dearborn system, entailing responsibilities for administration and curriculum development. Previously, he had been a lecturer in education at the University of Michigan for four and a half years, teaching graduate classes in curriculum and audiovisual education and serving as assistant director of the A-V center.

Earlier, he had been a staff member in the Michigan State Department of Public Instruction, serving as full-time consultant in citizenship education. His public school experience also includes two and a half years as supervisor of curriculum and A-V education in the Kalamazoo schools, four years as teacher, principal and director of instruction for the Wyoming Park public schools, Grand Rapids, two years each as a teacher in Wayland and in Gobles, all in Michigan.

For five years Mr. Mills was professor of education at Western Michigan College, Kalamazoo.

Within the three years of its existence, Saginaw Township district has witnessed an almost complete turnover of members on the board of education, along with the inevitable struggle between those of the district who desire independence and those who want the district to become part of the Saginaw city school district. Supt. Mills seems to have been caught in the cross fire between these interests. The relatively new board has decided not to renew his contract, which will expire on Feb. 1, 1962.

It is regrettable that the board is not retaining the leadership and services of the individual who was primarily responsible for the planning and development, not only of these two outstanding "middle schools," but also of the district's total program of instruction and school plant development, which has attracted the attention of the nation. — A.H.R.

How To Write a Policy

NATT B. BURBANK

Superintendent, Boulder Valley Reorganized District, Boulder, Colo.

HOW can a busy school administrator find time to write or revise the policy handbook of his district? How can he involve teachers and other employees in the production of the booklet? With all the other business which confronts his board of education, how can he ask the members to spend large amounts of time on the project? Who will actually do the writing? What should be included?

No longer is it necessary to make a special plea for the importance of the policy handbook. Its value is generally accepted. The only problems are those of time and method. Somebody has to write it, and somebody has to edit it. It is highly desirable to find some means by which every employee of the school system can have a part, however small, in the project. These steps require a great deal of time and effort.

Let everyone have a part. It is highly desirable that all school people be included in the writing or revising process. Several valuable outcomes are gained if this is done. Some mistakes are avoided, and needed changes are made. Every worker is fully informed about school policies, some of which he either does not know or does not remember. Morale is improved even though not all employee suggestions can be accepted.

Get a good writer. The key to success in this project is the availability

of a good writer who understands school philosophy and practices, who is familiar with the records of the district, and who senses the spirit of the organization. The secretary of the board of education is usually in an excellent position to meet these qualifications if he is a full-time employee. Or an experienced and intelligent office secretary may have sufficient maturity to perform this important task.

The time demands of this job are so heavy that the writer should be relieved of most of his regular duties for a considerable period of time. He cannot write the handbook and fulfill other tasks simultaneously.

The original draft should be prepared by one person, rather than by members of a committee, so that uniform style can be maintained. The same person should do final editing.

What shall go into it? One of the earliest decisions that has to be made in preparing a policy handbook is to determine what is to be included. Some boards of education believe that such a publication should present a complete summary of the philosophy, policy and regulations of the school district. Others prefer to issue only a policy statement. In the latter case the regulations are left to lesser means of dissemination.

Every handbook should include in the preface a statement of the basic philosophy of the board of education and the school district. The decision as to the scope and nature of the

remainder of the book rests with each individual board.

Changeable items such as salary schedules may be omitted to avoid frequent revision. To be most useful the book should cover all phases of school district operation.

There are many different approaches to the organization of a policy handbook. Usually included are such subjects as organization and administration, instructional services, business services, public relations, pupil personnel policies, policies for certificated and noncertificated employees, and the by-laws of the board of education. In addition, there should be a table of contents by chapter and a complete index.

Organize it. Before any writing is done, the superintendent and his advisory staff should determine how the handbook will be divided into sections and topics. It is important at this point to think through the process so as to provide logical sequence and complete coverage. The multitude of different topics to be listed requires alertness to avoid duplication of materials. The style of writing also should be determined.

Another necessity is a complete card index of the official minutes of board of education meetings in re-

(Text Continued on Page 56)

DECIMAL SYSTEM was used for organization of content in official handbook of former Boulder city school system, now part of larger district.

Handbook

Handbook of Policies and Procedures Boulder Public Schools

Organization of Content

- 1. The Board and Administration**
 - 1.1 The Board of Education — Purpose, Philosophy, Responsibilities, Limitations, Functions
 - 1.2 The Superintendent of Schools — Responsibilities
 - 1.3 The Assistant Superintendent for Instruction
 - 1.4 The Assistant Superintendent for Business
 - 1.5 The Building Principal
- 2. Instructional Services**
 - 2.1 Coordination of Studies
 - 2.2 Auxiliary and Instructional Services
 - 2.3 Areas of Special Instruction
- 3. Business Services**
 - 3.1 Finance and Accounting
 - 3.2 Purchase and Supply
 - 3.3 Food Services
 - 3.4 Clerical Services
 - 3.5 Plant Management
- 4. Public Relations**
 - 4.1 Goals
 - 4.2 Administration of the Program
 - 4.3 Agencies of Communication
- 5. Pupil Policies**
 - 5.1 Entrance Requirements
 - 5.2 Registration and Records
 - 5.3 Attendance Regulations
 - 5.4 Promotion Policies
 - 5.5 Reports to Parents
 - 5.6 Discipline
 - 5.7 Supervision of Pupils
 - 5.8 Release or Dismissal of Pupils
 - 5.9 Student Fees and Fines
- 6. Policies for Certificated Employees**
 - 6.1 Employment
 - 6.2 The School Session
 - 6.3 Duties of the Teacher
 - 6.4 Professional Ethics
 - 6.5 Leaves of Absence
 - 6.6 The Pay Plan
 - 6.7 Employee Benefits
 - 6.8 The Teachers' Council
- 7. Policies for Noncertificated Employees**
 - 7.1 Employment
 - 7.2 Classification
 - 7.3 Working Hours
 - 7.4 Compensation
 - 7.5 Leave Provisions
 - 7.6 Employee Benefits
 - 7.7 Employee Training
 - 7.8 Honesty Bond Premiums
 - 7.9 Grievances
 - 7.10 Terminations

cent years. Without this index a staggering load of reading is required in order to assemble the numerous policy-making actions of the board.

Writing the first draft. The writer should prepare the first draft of the handbook after the sequence has been determined. Plenty of time should be allowed for this step. Staff members should be available to help and advise the person who is preparing the script. The less experience the writer has had with school affairs, the more assistance he will need.

As soon as a major chapter has been completed, it should be submitted to the administrator and his staff. They should scrutinize it thoroughly for accuracy and inclusiveness. The superintendent probably will call upon several people who are well versed in state law and local policy and regulation to help.

Next, the script should be read by the board of education for preliminary, tentative screening. This weeds out unacceptable portions and keeps the board fully informed on the progress of the project. Often, time is saved by this particular checking step. Adverse board opinion on any particular part of the handbook thus is discovered in the early stages of writing when changes can be made easily. Each board member should receive a copy of the draft several days before the board meeting. Thus, comments and criticisms can be noted in advance, and much meeting time is saved.

Everybody takes a hand. Then comes the most difficult and time consuming period in the entire process. The latest draft of all sections of the book should be submitted to all

employees for suggestions and constructive criticisms. Each person who works for the school system should be given a copy to study at his leisure. Two weeks should be a reasonable time allowance for reading unless examinations or some other heavy work load confronts teachers at the time.

It is helpful to provide a mimeographed form on which suggestions, comments and criticisms can be written by the employee. There should be no place for a signature; anonymity of response should be emphasized.

This form makes it easier to measure the intensity of employee opinion by the number of persons who point out different problems. It is also less likely that any of the various opinions will be forgotten in the process of collation. Employees will think out their proposals more carefully if they are asked to write them down. Finally, the anonymity of this type of reaction protects any person who may be hesitant to make oral suggestions.

Invite suggestions. After employees have been given sufficient time to study the preliminary draft, several meetings should be scheduled for general discussion. It is well to plan separate sessions for the various employee groups. For example, custodians usually will react more freely if they meet by themselves. The size of these discussion groups should be limited to 20 or 30 persons.

At these meetings the handbook writer and representatives of the central administration should listen to comments from employees, clear up their misunderstandings, and receive their written proposals for changes.

The next task is to tabulate all sug-

gestions. The summarizing table should show the number of times that each criticism was made. The various proposals should be cross-referenced with the text. This will facilitate study by the board of education members.

Chief administrator makes recommendations. When the material has been thoroughly organized into as simple a form as possible, it is presented to the board of education for final action. Here the chief administrator has a responsibility to make a recommendation concerning each proposed change. The board then will accept some and reject others. This constitutes the final and official determination of the content of the book.

The final step is publication. The advice of a good printer should be heeded in the selection of type faces. The ideal method is to have the handbook printed on a good grade of paper. If it is not possible to undertake this more expensive type of reproduction, mimeographing or some other less costly plan can be followed.

Every employee should receive a copy of the final document. Community leaders and other interested citizens will want to be familiar with the contents of the handbook. A good supply of handbooks should be laid aside for future needs in the period preceding the next revision.

To one who has not been through the foregoing process, it may seem like a staggering prospect. It is not a simple piece of work; it's a long and difficult job.

It will pay off. The results that flow from it, however, are well worth the travail. The handbook facilitates efficient administration, does much to avert misunderstandings, and provides information for every type of need. Not the least of the benefits is heightened morale on the part of employees. The very act of taking part in the preparation of a book of this kind is good for the people who work in a school system. They learn a great deal about the organization and feel much better about being a part of it. ■



NATT B. BURBANK . . . superintendent, Boulder Valley Reorganized District, Colorado, since 1961; superintendent, Boulder, Colo., since 1949; superintendent, Melrose, Mass., 1947-49; superintendent, Concord, N.H., 1940-47; superintendent, Bellows Falls, Vt., 1936-40; superintendent, Danville, Vt., 1932-36; superintendent, Morrisville, Vt., 1930-31; teacher, junior high school, Burlington, Vt., 1926-30; vice president, American Association of School Administrators, 1961-62.



CHALK DUST

Frederic M. Harris

MOVING REFLECTIONS

DURING the past summer, the United States Office of Education has been moving into its new home. There are probably some sour-minded characters who will suggest that this is the first time the U.S.O.E. has moved anywhere in its hundred year history.

As a loyal U.S.O.E. employee, who has happily been paroled from an indeterminate sentence at hard labor as superintendent of schools at Sugartown, I indignantly repudiate such ill-natured and unfounded assertions. I happily point out that the new address of the U.S. Office of Education is still Independence Avenue.

I must admit, however, that the long-awaited move took me by surprise. The first indication of trouble came when the moving gang descended and literally pulled the rug out from under me. Their abrupt and impolite action brought back mixed emotions of a lifetime as a school administrator.

It certainly should have come as no surprise to a school superintendent to have the rug pulled out from under him. It happens with regularity in the highest as well as the lowest pedagogical circles, but it seemed to me to occur in Sugartown even more frequently than in other districts, although statistics show that Sugartown was only the "mean" in this respect and that the rug pulling in that community is really no greater or less than anywhere else.

Rug pulling, however, seemed to be a particularly jolly sport in Sugartown, and an educational rug puller was held in high esteem. The rug used to be pulled from under me at rather regular intervals — at budget time, during contract negotiations, and whenever I left the community for a short vacation. Among the most proficient rug pullers, of course, was Mrs. Busty, but I must admit she had plenty of second and third class rug pullers as helpers.

It was only after I learned to get the board of education on one side of the rug and Mrs. Busty on the other that the rug stayed in place, albeit none too securely. I can testify that a school administrator in the center of a vigorous rug pulling contest feels somewhat akin

to a space traveler among the gamma rays.

A pulled rug is apt to leave the school administrator with a somewhat desolated sensitivity. He imagines that his last status symbol has been removed, and a superintendent needs a little status whenever possible.

RETIREMENT PROBLEMS

THERE is an increasing amount of twaddle written about retirement problems of a school administrator, e.g.: How can he safely reduce his over-exercised pituitary gland? How can he suddenly cut down his daily 20 mile supervisory gallop? What about his over-abused tummy after absorbing 30 years of cafeteria pie? But these minor concerns completely ignore the most important problem of all: Where shall he store his impedimenta?

During a school superintendent's career, he collects more curious and unusual adhesions than any other person alive, unless it be a rock-gardener or a secondhand bottle collector. At one time or another he is presented with loving cups, certificates of merit and demerit, diplomas, photographs, hotfoots and traveling bags, brief cases, cactus plants, moose heads, secondhand libraries, stuffed fish, and canisters of lemonade, nail files, memorandum pads, and overstuffed attics.

All of these mementos are of great sentimental value. He dare not leave them to smother his successor even though at times the inclination to do so may be almost overpowering; yet the Smithsonian Institution refuses any part of them, and no superintendent ever has enough money to endow a museum of his own.

Useless as they are, many of these curios arouse thoughtful and disturbing questions — collection of keys, for example. In his meanderings, the school administrator collects pounds of keys — keys to various cities presented to him in the first flush of enthusiasm when he accepts the new job; jingling keys purporting to denote scholarship, wisdom or dues paying faithfulness; keys to turn on the electricity and turn off the toilets;

keys which once fitted buildings, offices, sanctums and classrooms which have long since crumbled into the dust.

"Have I locked too many doors?" he must sometimes exclaim in anguish. "Have I stabled too many sacred cows? Have I closed and barred doors instead of keeping them open?"

"Football? What on earth can anyone do with a collapsed, dispirited, decaying pigskin that so long ago was the subject of acrimony and battle, disrupting a fine relationship with some neighboring school. Was ever a football important enough to fight about?" the superintendent must ask himself. "In my educational perplexities, did I allow the skin of a pig a bigger place than the calfskin in the library?"

PREPARING ADMINISTRATORS

AN A.A.S.A. Yearbook advises a candidate for the school superintendency to sharpen his technical skills, his human skills, and his conceptual skills. This is all to the good, but, while many candidates have futilely been dithering around trying to sharpen Conceptual Skill Number Two (i.e. "grasping the social order in which schools operate"), it is heartening to discover that Bill Bracewell, a graduate student at Emory University, has boldly gone ahead with a practical application of that conceptual skill.

In preparation for his doctoral dissertation and his future career, Bill is collecting black widow spiders. He extracts their poison and takes it apart

"Analysis, anyone?"



chemically to learn how the venom attacks the nervous system and how to neutralize such attacks.

In addition to the present courses in bus driving, public relations, and togetherness, graduate schools of education might well introduce a course in black widow spider analyzing. Such a study would seem to be of practical value in handling many of the problems which arise in school administration.

If you ever need a job, Bill, let me know. The Sugartown schools could use your skills and understandings.

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PRESSURE TREATING cylinder is receiving "charge" of lumber, loaded on trams, for wood preservative treatment. Photo shows basic units of a pressure treating plant. Note chemical storage tanks and operation rooms in background.



Leon Trice photography

INSPECTING the treated wood of the spectator bleachers at New Trier Township High School is Ernest N. Rodbro, supervising engineer. After investigating various methods of wood preservation and types of wood, Mr. Rodbro chose a preserving treatment that promised long life for the bleacher members. He has been with New Trier since 1950. Prior to that time, Mr. Rodbro was employed by private industry. A native of Waukegan, Ill., Mr. Rodbro was president of the Midwest Grounds Management Association in 1958, after serving the association as vice president in 1957.

Found: How

REPLACING cracked footboards and slivered seat boards of spectator bleachers is a source of major expense for many school systems. At New Trier Township High School in Winnetka, Ill., a way has been found to extend the life of the wood parts of these bleachers so they will be of service, present inspection suggests, for as long as 30 years.

New Trier has a set of three outdoor permanent bleachers seating about 3000 persons. These bleachers have an over-all length of 315 feet, are 18 rows high with wooden seats and footboards mounted on an angle iron framework. The original wooden portions, of structural grade fir, were installed during the summer of 1948. They were well maintained and completely painted about every three years (the tops of the seats and footboards were painted every year). Nevertheless, trouble developed.

Premature Deterioration. The rais-



To Make Bleachers Last for Decades

ERNEST N. RODBRO

ing of the grain in the plain-sawed structural fir, which has a flat grain nature, created slivers. This was the reason for the yearly painting — to keep the grain smooth. Also, the boards were badly cupped and, consequently, held water for long periods.

After only six years of service, by the fall of 1954, so much deterioration had taken place that cracks and broken boards presented a real hazard. Replacement was indicated. Since most of the breakage was in the footboards — apparently caused by large groups standing and jumping during crucial moments of football games — it seemed that these sections should be replaced during the first year and the seat boards in subsequent years.

Problem Solution. In an attempt to find a solution to the problem of short life and slivering seat boards, I made an investigation of various

methods of wood preservation and types of wood. All the woods with a natural built-in resistance to moisture (such as redwood, cedar or cypress) either were impractical economically or lacking in structural strength. Many varieties of paints, penetrating sealers, preservatives, as well as various methods of application (such as brushing, spraying, dipping and pressurizing) were considered. As a result, it was decided to use treated Douglas fir according to the following specifications:

"Furnish the following boards cut to the sizes listed before treatment. . . . Footboards to be dense select structural Douglas fir and seat boards to be B or Better vertical grain Douglas fir, S4S, eased edges, sorted and selected so that each piece will be free of sap and/or pitchpockets on one side. This lumber to be pressure treated by the full cell method, with a 0.35 pounds per cubic foot reten-

tion of tanalith water-borne preservative salts."

Competitive bids were taken on the lumber from the two largest lumber dealers in near-by Chicago, and it was found that the bids were within 10 per cent of each other. A trip to each of the bidders' yards was made for an examination of the piles of lumber from which the wood was to be selected.

Fortunately, the low bidder's lumber had a better appearance. It is important that the material be purchased from a large, reliable firm that has sufficient stock from which to make a good selection. The table below shows the quantities purchased and the prices paid for the treated lumber. Treatment cost ordinarily represents from 10 to 20 per cent of the cost of the untreated lumber.

Replacement Procedure. To avoid warping, this heavy, wet, treated
(Continued on Page 76)

TOTAL COST of replacing the untreated wood portions (footboards and seat boards) of spectator bleachers at New Trier Township High School with chemically impreg-

nated lumber is shown in this table. It includes the cost of the wood preserving treatment, which represents from 10 to 20 per cent of the price of the untreated wood.

	Board Feet	Number Pieces	Unit Cost	Total Cost
All footboards installed June 1955	19,964	1337	\$203.50/M....	\$ 4,062.69
1st third of seat boards installed June 1956	3,360	320	419.50/M....	1,409.52
2d third of seat boards installed June 1957	3,360	320	425.00/M....	1,428.00
3d third of seat boards installed June 1958	3,360	320	425.00/M....	1,428.00
Total	30,044	2297		\$ 8,328.21
Estimated Labor Cost				2,000.00
Estimated Misc. Hardware				172.00
Total Estimated Cost				\$10,500.21

Use of Teaching Machines Will Grow, But They Won't Replace Textbooks

SELF-TEACHING devices and programmed instructional materials are not going to replace conventional textbooks in the next 20 years, say 88 per cent of the administrators responding to December's opinion poll.

"We don't move this fast in education," commented a schoolman from Indiana.

Most of the majority of respondents believe that use of various kinds of teaching machines will increase, but not to the extent that they will largely replace texts. "Anything can happen," began a Michigan superintendent, "but the necessity to learn to read with understanding, to search and to find knowledge will always require use of textbooks."

"As radio, television, films, filmstrips and other mechanical devices have never been able to accomplish this task [replacing texts], neither will the teaching machine," contends a Massachusetts respondent. Agreed an administrator from Arkansas: "Regardless of the teaching aids that are developed, 'there will always be a need for books.'"

A Vermont official considered the textbook's being "owned by the student" an important relationship.

Many administrators believe that self-teaching devices and programmed instructional materials will be used more and more to *supplement* textbooks. "However," said an Iowa superintendent, these materials will be only "another fine teaching tool."

"Since our cultural heritage is passed on so largely through books, it would seem that [programed materials and self-teaching devices] will largely supplement" conventional textbooks, said an Indiana respondent.

"Programed instructional materials will play a large part in the enrichment" of programs, commented an Illinois administrator. Another Illinois superintendent repeated that "these machines will be no more than supplements" and that their use "will not be universal until teachers are taught how to use them." Also, he added, "Schools must find enough money to buy them."

The matter of instruction in public schools involves more, obviously,

than just textbooks and/or teaching machines. Respondents brought up a vital performer — the teacher.

A Vermont schoolman wrote: "Motivation is a primary factor in learning. This requires a frequent interpersonal relationship [between student and teacher] which is not possible with teaching machines. Machines will merely be another tool, albeit an important one, for the teacher to use to best advantages."

A Californian commented: "The majority of students do not have the initiative and drive to work with a machine alone; they need discipline and understanding, which a machine cannot give."

Another testimony in behalf of the teacher came from this schoolman: "Some teachers can teach more with the almanac than other teachers can teach with all the new equipment available."

Machines Can't Inspire

Limitations of programed instructional materials and self-teaching devices will prevent their replacing textbooks, some believe. "Programed instructional materials cannot cut across subject areas, stimulate creative and critical thought, inspire and motivate to the extent that a conventional text can," said a Wisconsin schoolman.

"Programed instructional materials," claimed a Missouri superintendent, "remove one of the most vital phases of education, which is [de-

veloping] the ability to assimilate piecemeal information into the general conclusion or insight."

One group of respondents thought a good use of teaching machines would be individual instruction for students. "They would be too expensive for an entire class," a Californian said, "because of cost of installation and maintenance, lack of flexibility in material, and difficulty in obtaining adequate materials."

An Indiana superintendent believes that the threat of machines' replacing textbooks "will inspire textbook [manufacturers] to strive for better presentation."

Texts Have Been Crutch

Twelve per cent of the respondents believe that teaching machines will replace books in the public schools. Said a Maine administrator: "The textbook, though a great aid to teaching and learning, has been a hideous protector and crutch for much that is poor in the present formal, and often ineffective, class procedure."

A Californian said "there seems to be real possibilities in learning material better geared to the 'readiness' of individuals."

"For the purpose of teaching concepts, I believe programed instructional materials offer a much greater potential than the conventional textbooks," said another California superintendent.

A Maine respondent claims that "teaching machines are already having an effect on textbook construction. They may never replace the book, but they certainly are going to influence the format and content greatly."

OPINION POLL FINDINGS:

Do you believe self-teaching devices and programed instructional materials will largely replace conventional textbooks in the public schools during the next 20 years?

Yes...12%

No...88%

Based on a 4 per cent proportional sampling of 16,000 school administrators in continental United States, this survey brought a 42 per cent response.



Photo by Gilbert A. Milne & Co.

MacPHERSON TARTAN jackets of bright red were worn by members of the Canadian host committee. Here A.S.B.O. President Herschel S. Brannen (left) tries on one of the jackets "just for size." He is assisted by William J. McCordic, committee co-chairman and executive secretary of the Metropolitan School Board.

New Research Gets A.S.B.O. Limelight in Canada

LEO E. BUEHRING

TORONTO, ONT. — "The combination of hydrogen and hate has produced fear of a scope and nature not felt in the world before. If education means the creation of trained, balanced minds and the development of a capacity to exercise sober and unprejudiced judgment, then there is more need for education today than ever before."

Expressing this judgment was the Hon. Lester Bowles Pearson, leader of the Queen's loyal opposition in Canada. He was addressing members of the Association of School Business Officials of the United States and Canada which held its 47th annual meeting and educational exhibit here October 7 to 12. Registration was 2690, the largest in the organization's 51 year history.

The liberal leader explained that "while education is not in itself the

substance of the progress of mankind, it is now the main instrument that we have at our command for achieving such progress." He added: "If education is to help us survive now, as it must to overcome our crises, it must remain, above all, what it has been: the process of learning how to think honestly and straight, to distinguish between true and false, to appreciate quality and beauty wherever they are found, and to take part, with intelligence and tolerance, in the full exchange of ideas which is at once a basic impulse and the crowning glory of human progress."

Mr. Pearson emphasized that the educational needs of his country as well as those of the United States can be "met fully only on a national scale with financial resources that the less wealthy provinces and states cannot command for themselves and for

which they must look in part to the federal government." He also called upon both Canada and the United States to join in the European Common Market in order to form a genuine community of the North Atlantic.

Canadian hospitality and A.S.B.O. research vied for top attention at the meeting. The hospitality was supplied by 225 school people of the Toronto area, including a 40-member local committee. The emphasis on research was supplied throughout the week by the 10 A.S.B.O. research committees, members of which appeared on the program at various times and in various ways.

It was the third time the association has met in Canada. Previous meetings, also in Toronto, were held in 1926 and 1951. During the 51 year history of the body (annual meetings were not held during certain years), three Canadians have filled the position of international president: C. E. Cyril Dyson, 1930; C. Harvey R. Fuller, 1948, and Percy M. Muir, 1959.

Because of a strike at the headquarters hotel, certain of the programs had to be conducted at other locations; some performers, dignitaries and musicians refused to cross the picket lines. Guest services at the hotel were not seriously interrupted, and the meetings proceeded smoothly and in pleasant surroundings.

A taste of old world pomp came with the arrival and departure of the vice-regal party of His Honour* Lt. Col. J. Keiller Mackay, lieutenant-governor of Ontario, who represented Her Majesty Queen Elizabeth at the first general session. The music of bagpipe players in full regalia added to the drama. Those prudent enough to have registered prior to the convention subsequently were invited to a reception in the vice-regal suite in the parliament buildings, Queen's Park.

As an association, or through its board of directors and/or committees, the representatives of the nonteaching areas of school management took care of these matters:

1. Amended A.S.B.O.'s constitution and by-laws to assure a nonprofit status, classification as an educational

organization, and continued exemption from taxes.

2. Increased the number of non-officer directors from four to six in order to provide wider geographical representation, bringing the board total to 11; stipulated that board members may not serve successive terms after this year.

3. Advanced President-Elect Jos. P. McElligott, chief of the division of the budget of the San Francisco Unified School District, to the presidency, succeeding Herschel S. Brannen, business manager of the Unified School District, Houston; elected other officers and directors, and appointed the two additional directors provided for under the amended by-laws. (All officials take office on January 1.)

4. Explored plans for effecting closer affiliation of the international body with state, provincial and regional associations of school business officials. (Presidents of the various groups were asked to determine the wishes of their members regarding the type of affiliation desired, and to bring back suggestions to the 1962 annual meeting.)

5. Learned that for approximately \$20,000 a new site had been acquired in Evanston, Ill., as the permanent international headquarters of A.S.B.O. (A new building is expected to be ready for occupancy before the close of 1962.)

6. Took steps to set up a research committee on data processing early in 1962. "A.S.B.O. sees the need for more emphasis in this field of education and intends to take the lead in this development."

7. Directed the committee on professionalization and certification to continue its study and to set up suggested standards for the certification of chief school business officials.

8. Spent two afternoons attending 23 sectional meetings and discussion groups and devoted one evening to "stumping the experts" at the annual "clinic."

9. Attended a "wing-ding hoe-down," a vesper service, the annual directors' reception, and a Canadian banquet-dance, and toured Toronto area schools.

10. Viewed educational exhibits of 89 companies displayed in 141 booths on two floors of the hotel; attended the annual exhibitors' entertainment (a variety show).

11. Confirmed Dallas as the 1962 annual meeting locale, during the week of October 15; canceled its previous plans to meet in Detroit in 1963. (Now under consideration for 1963 are Denver and Chicago, the designation to be made at the board of directors meeting in January. If Denver is selected, the meeting will be held during the first week of November, instead of October 26 to 31 as previously announced.)

His Honour Lt. Col. Mackay, in his welcome address as a representative of Her Majesty the Queen, lauded the accomplishments of Canada and the United States in living side by side as good neighbors while reserving the rights to disagree on specific matters. He stressed the importance of suitable school facilities in creating an environment that is conducive to molding character. One goal of education, Colonel Mackay declared, is good manners, which are the outward sign of a complete personality. Important, he said, are an appreciation of beauty, a willingness to serve, and respect for the tradition of growth.

President Brannen, in his presidential message, said that throughout his year of administration A.S.B.O. had endeavored to achieve particularly these four goals: (1) strengthening of membership; (2) a close working relationship between the international organization and the state, provincial and regional groups; (3) a broadening and deepening of research activities, and (4) business statesmanship, which he said involved a respect for school business functions. He said he had witnessed strides of educational progress on his visits to eight state and provincial meetings and workshops, and that he had encountered superior quality of program planning, research efforts, and a meeting of responsibilities of the profession.

"As we continue meeting the challenge of the Sixties, the Seventies, the Eighties, and beyond," said President Brannen, "my recommendation would be that we most certainly continue to step up our work in the field of research and that we continue to encourage membership in our organization by persons actually interested in improving themselves in the field of school business manage-

*In this story the Canadian (British) version of spelling is used for titles.



SCOTTISH BAGPIPERS in colorful regalia led A.S.B.O. members back to the hotel following the opening session at O'Keefe Center.



Photos by Gilbert A. Milne & Co.

BRILLIANT PAGEANTRY marked the opening ceremonies, highlighted by the arrival and departure of the vice-regal party of His Hon. Lt. Col. John Keiller Mackay, lieutenant-governor of Ontario, represent-



ing Her Majesty the Queen. President-Elect Jos. P. McElligott (left photo) responded to Mackay's greeting by saying: "Thank God for giving us such a good neighbor." Pres. Brannen (center, right photo) escorts Mackay into hall.



Photos by Gilbert A. Milne & Co.

Sought: More

ment and who are willing to make a contribution to our association."

Robert E. T. Rourke told A.S.B.O. members in his report on a visit to Russia that the Soviets do many right things for the wrong reasons. "We must match their results without copying their methods," he declared. Mr. Rourke — former headmaster of Pickering College, outside of Toronto, textbook writer, and participant in international efforts to improve the teaching of mathematics — stressed the need of a greater "exaltation of work" by our youths and the importance of finding in their religion a faith to live by.

F. G. Gardiner, "super-mayor" of the 13 municipalities that comprise Metropolitan Toronto, in his address to a general assembly offered this definition of education: "Education is the process whereby a pupil who must be taught is transformed to a student who teaches himself — usually by the later years of high school. If this is not accomplished, college will be a total loss." Education, Mr. Gardiner added, should provide a fund of knowledge from which a student can shape ideas and communicate these ideas courageously.

KEYNOTE ADDRESS was delivered by the Hon. **Lester B. Pearson** (top photo), leader of Queen Elizabeth's loyal opposition. Mr. Pearson lauded the ability of Canada and U.S. to remain friends in face of differences. **WELCOME PARTY** took form of wing-ding hoedown (center photo) and enabled early-bird delegates to get acquainted with Canadian hosts. **PAST PRESIDENT'S** plaque is received by **G. Alvin Wilson**, 1960 A.S.B.O. president (left in lower photo), from **Charles W. Foster**, executive secretary.

formal ties among school business groups

Few resolutions were presented to the body this year. One of the resolutions commended the work of President Brannen and of Charles W. Foster, executive secretary-treasurer-editor, "whose effectiveness increased with expanding responsibility."

The resolutions committee, of which Ed. F. Hurst, Miami, was chairman, presented to the board of directors a recommendation that plans be initiated to assure at future annual meetings a greater participation of members in the framing of resolutions.

President McElligott shared with a representative of this magazine some of his aspirations for the 1962 calendar year. He emphasized that A.S.B.O. exists to help improve business practices in the schools. Research is the backbone of the association, Mr. McElligott said, and as president he will strive to make every facility available to the research committees to enable them to render optimum service. If committees work with a unity of purpose they will help strengthen both the national and the state and provincial associations, he believes.

Mr. McElligott explained that strong bonds but loose formal affiliations presently exist between A.S.B.O. and state, provincial and regional bodies of school business officials. It is hoped that these relations can be formalized by some type of affiliations without interfering with the autonomy of the individual groups, he said. One of the outcomes might be the preparation of a joint statement of purposes.

A specific goal of A.S.B.O. is to help states set up sound school accounting practices, Mr. McElligott explained, along the lines of the accounting manual published by the U.S. Office of Education.

Dr. Foster served for the sixth time as A.S.B.O. convention manager. Dr. Foster told *The Nation's Schools* that he had nothing but praise for the unstinting efforts of the Canadian local

committee, which was by far the largest local committee ever to function. Co-chairmen were Zed S. Phimister, director of education (superintendent of schools) at Toronto, and William J. McCordic, executive secretary, Metropolitan School Board, Toronto. According to Dr. Foster, the challenge now is: How can A.S.B.O. improve its annual meeting, in Dallas, next year? That goal will be kept before the membership during the new association year, he stated.

New officials of the association take office on January 1. The elected officers, in addition to President McElligott, are Everett Zabriskie, Nutley, N.J., president-elect, and Frederick W. Hill, Minneapolis, vice president.

Elected directors are Herman C. Bleckschmidt, St. Louis, Mo. (reelected for a two-year term), and Ed. F. Hurst, Miami. The two new directors appointed by the board of directors under the revised by-laws are Robert D. Schoales, architect and superintendent of buildings, London, Ont., and N. L. George, assistant superintendent, administrative services, Oklahoma City. President Brannen automatically becomes an executive committeeman by virtue of his service as president.

Holdover directors are Gray N. Taylor, Mount Kisco, N.Y., and Robert H. Ross, Toledo, Ohio.

Active membership of the association now stands at approximately 2500. School board members, exhibitors and others bring the total to about 3000. The Toronto meeting registration of 2690 broke the previous record of 2553 at the 1959 meeting in Miami Beach. The active member registration of 1152 also was a record breaker.

Under the revised by-laws, the category "active" member will be eliminated. Instead, there is being created a "school" membership available to qualified persons representing either a school, school board, or school district. The latter membership may be subscribed to

by the board of education or by the individual. The five other types of membership are student, honorary, library, emeritus and life. Only school and life members have voting rights.

Publication and research projects presently under way include the following, according to reports made at the convention:

1. "Purchasing and Supply Management for School Business Officials." This will be published before the end of 1961 as Bulletin No. 22. The manual was prepared by members of the purchasing and supply management research committee of A.S.B.O., of which H. Spilman Burns is chairman.

2. "Pupil Transportation Liability and Insurance." When the study is completed by Clifford Jordan, the findings will be referred to A.S.B.O.'s insurance management committee for possible inclusion in a general insurance manual.

3. "Group Health and Accident Insurance." Materials emanating from a study by Palmer Campen of Buena Park, Calif., likewise are being referred to the insurance management committee.

A.S.B.O. also is cooperating with the U.S. Office of Education on a pupil accounting handbook. Roy Ricketts, Peoria, Ill., chairman of the association's research committee on accounting and finance, is representing the association.

A joint committee of A.S.B.O. and the American School Food Service Association will prepare a bulletin on the responsibilities of the school food service director.

Future meeting places have been planned through 1966. Following the 1962 meeting in Dallas and the 1963 session (expected to be held either in Denver or Chicago), meeting places and dates will be as follows: 1964, Civic Auditorium, Brooks Hall, San Francisco, October 17 to 22; 1965, Municipal Auditorium, Minneapolis, October 9 to 14; 1966, Convention Hall, Atlantic City, October 8 to 13.

More A.S.B.O. photos are shown on Page 66.

At A.S.B.O. Meeting . . .

FORMAL AFFILIATION between the international body and state - provincial - regional associations was discussed at a meeting of A.S.B.O. board members and state presidents. (Persons with no state indication are A.S.B.O. officers and directors.) Front row: Arnold M. Hess, New Jersey; Gray N. Taylor, director; Albert C. Lindemann, New York; Austin F. Bates, Michigan.

Second row: H. C. Bleckschmidt, director; Dean A. Shinneman, Illinois; G. Alvin Wilson, past president; A. A. Schweiger, Minnesota; Mike Hesse, California. Third row: K. L. Park, Iowa; Alfred Essock, Missouri; Ernest N. Carl, California; Mrs. Frances Lennox, Utah; Charles W. Foster, executive secretary; Jos. P. McElligott, president-elect; H. S. Brannen, president; Everett Zabriskie, vice president.



Fourth row: Maurice O. Woolams, Texas; Paul Leary, Ohio; Galen B. Sargeant, Indiana; Robert H. Ross, director; John E. Kramer, Colorado; Harry Pullen, Ontario; R. E. Hewey, South Carolina; Paul Franklin, Mississippi, and Frederick W. Hill, director.



Group photos by Gilbert A. Milne & Co.

PAST PRESIDENTS on hand for the Toronto picture included (l. to r.): G. Alvin Wilson (1960); Robert W. Shafer (1947); John W. Lewis (1940); Frank J. Hochstuhl Jr. (1955); Percy M. Muir (1959); Andrew C. Hutson Jr. (1957); Francis R. Scherer (1950), and H. C. Roberts (1939).

A.S.B.O. OFFICIALS, in six photos at right, will assume the indicated offices on January 1: Everett Zabriskie, president-elect; Frederick W. Hill, vice president; H. C. Bleckschmidt, reelected director; Ed. F. Hurst, director. N. L. George and Robert D. Schoales were appointed to fill new directorships created by a change in the by-laws.



ZABRISKIE



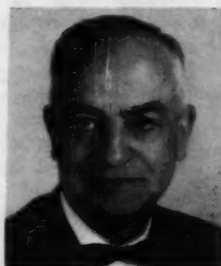
HILL



BLECKSCHMIDT



HURST



GEORGE



SCHOALES

**School plant specialists at annual meeting
pinpoint educational objectives, explore implications
for planning new buildings, tell**

Why School Planners Must Be Educators

LEO E. BUEHRING

ATLANTA. — "The school building does not merely *house* an educational program; it is an integral part of that program." This was the point emphasized by Shirley Cooper in his opening address at the 38th annual meeting of the National Council on Schoolhouse Construction, in session here October 3 to 6.

The associate executive secretary of the American Association of School Administrators told the school plant planners: "You are a part of an educational team. Schools must reflect the basic concerns and commitments of education. They must help shape an educational program that will meet the needs of democracy at home and abroad."

Dr. Cooper's address elaborated upon the convention theme: The Emerging Education Program and Its Implications for School Construction. Other speakers addressed themselves to individual components of the theme — elementary, secondary and junior college programs, and, specifically, educational television.

For the first time the officers, executive committeemen, and members of various committees had assembled two days in advance of the opening meeting. This served to minimize convention pressures and left time for members to visit Atlanta's many attractions. It was the first time since its organization in 1922 that the body

met in the Gateway City. (No convention was held during 1944.)

During the four days of meetings N.C.S.C. members took these steps:

1. Moved up Vice President James L. Taylor to the presidency and elected other officers and directors. Dr. Taylor is a specialist for planning school buildings, U.S.O.E.

2. Decided to change the convention format for the future so that sessions will close with the banquet, the business meeting to be held on the afternoon of the preceding day.

3. Confirmed the Denver Hilton Hotel as the 1962 meeting place (October 8 to 12), and decided to meet in 1963 in New York City area.

4. Learned that moving of the headquarters office from Nashville, Tenn., to East Lansing, Mich., had been completed. W. D. McClurkin, secretary-treasurer for 14 consecutive terms, and Floyd G. Parker, 1960-61 secretary-treasurer, were commended for their work in this connection. (Dr. Parker, associate professor of education at Michigan State University, was reelected secretary-treasurer.)

5. Agreed to continue with the revision of the National Council's "Guide for Planning School Plants" and set 1962 as the publication date.

6. Held a reception for new members for the first time and agreed to

make this reception a part of future annual meetings.

7. Set in motion machinery that will permit more long-range planning, including the acquisition of funds which can be used on the organization's own terms for research and fact-finding projects.



Jim Cherry

Education has largely escaped the dynamics of change. This was observed by Jim Cherry, superintendent of DeKalb County Schools, in his address on elementary school programs. He said that this development was not the fault of administrators, but had come about because free enterprise has not put enough money back into the school system.

Supt. Cherry added that the educational program and the school building program had been controlled not by the best abilities of administrators, boards and staffs, but by inadequate financing.

Instructional patterns come and go. To identify the emerging educational programs in the secondary schools, Richard Featherstone reviewed a dozen of the "plans" which had been advocated during the last

Type and size of space needed? Simple; ask this

question: How many persons are expected to do what?

100 years, going back to the St. Louis plan of 1860. The assistant dean of the college of education, Michigan State University, arrived at the conclusion that the various plans had little effect on school plant construction, except for the platoon system which, by its larger space requirements, had made some impact. The greater flexibility of the Trump system also calls for a different type of space planning, he said.

Implications for planning in the emerging educational programs of the junior college were explored by James L. Wattenbarger, director of community junior colleges, Florida State Department of Education. Dr. Wattenbarger listed the following considerations for the planning of post-secondary schools: provision for a student office building in which space is set aside (perhaps on a rental basis) for student study, to take care of the overflow from the library. (This building would replace the dormitories of the traditional college.) Facilities also should be supplied for serving three meals a day, for parking a large number of cars, for television screens and equipment in every classroom, for teaching machines and sound laboratories, and for room for record keeping devices.

In view of contemplated year-round study, air conditioning is indicated, as are larger laboratory facilities, teaching machine and sound laboratories, and larger counseling areas. Movable walls will be installed increasingly. Since by 1970 from 45 to 50 per cent of high school graduates will be going to college, larger sites, too, will be needed.

Special consideration was given at one session to educational television and its implications for building. In this connection Kenneth A. Christensen, director of educational television, University of Florida, emphasized how the new audio-visual media have made space allocation in school buildings more complex. For instance,

much more storage space will have to be allotted.

In addition to being activity oriented, audio-visual space must have good acoustics, lighting and viewing, as well as comfortable temperature control and ventilation. To be reckoned with also are darkening blinds, seating arrangement, chairs with arm rests for taking notes, and a generally favorable environment. It must be known how audio-visual materials are to be distributed and whether the space is to be used for total teaching or occasional enrichment. The architect can do only as well in his planning as the skill the administrator has in stating what functions the space is to serve.

The South is facing up to its problems. In bringing greetings to the organization, John W. Letson, superintendent of Atlanta City schools, said that no city in the nation has more sincerely tackled the common and specific educational concerns of the day than has Atlanta, and that it now is facing and will continue to face these problems for years to come.

Claude Purcell, Georgia state superintendent of schools, said that good school buildings are as much the responsibility of the state as are school operations. He explained his state's system of consolidation where some 4000 districts have been converted into 159 county and 39 city systems.

Windowless schools are doing a good job in New Mexico in meeting the local hazards of dust, glare, solar heat, and uncomfortable thermal conditions. At one of the evening sessions George J. Collins, director, School Plant Laboratory, New Mexico State Department of Education, gave assurance that these problems were being solved to the satisfaction of children and the teaching staff. Other advantages mentioned were: lower cost insurance, less painting to

be done, and less general maintenance. Not one teacher has sought a transfer. Instead, teachers reported these benefits: less disturbance, better visual balance, less fatigue, and more display space. Physical well-being and space, thermo and seeing comfort have been achieved, Dr. Collins reported. Construction costs also are considerably less.

Dr. Collins indicated that children do not know what claustrophobia means, so they have no objection to the absence of a view of the outside.

Inquiry among those attending this session showed that windowless schools or additions were in the planning stage in these states: Florida (Dade County), Ohio, Utah, West Virginia, Tennessee, Minnesota and Virginia. One windowless school is now in use at the University of Tennessee.

At another evening session a report was made on the status of the property accounting handbook published by the U.S. Office of Education. The problems involved in adopting the system advocated by this publication have tended to delay its use, but progress is being made.

In a third meeting members of the task force committee on school lighting reported that the American Standards Association is expected to approve the "guide" agreed upon by representatives of 19 organizations, including the National Council. It is to be published in the spring of 1962 by the Illuminating Engineering Society.

Officers evaluate work of the National Council. Toward the close of the convention the retiring president, Arnold C. Tjomsland, discussed his administration with a representative of The NATION'S SCHOOLS. The associate professor of education at Washington State University, Pullman, said that members of his organization collectively have a lot of valuable information that the organization is not using. He believes that as schoolmen, school planners (working individually as well as collectively as an association) can make a major contribution to the education of this country.

Secretary-Treasurer Floyd G. Parker said that N.C.S.C. programs have been getting away from brick and stone and questions as to the type of
(Continued on Page 78)



Floyd G. Parker was reelected secretary-treasurer. He is associate professor of education at Michigan State University, East Lansing.



James L. Taylor is the new president of N.C.S.C. and is a specialist for planning school buildings for the United States Office of Education. He was vice president of the Council in 1960-61.



Members of N.C.S.C. board of directors include (l. to r.): James L. Reid, new vice president and former executive committee member, supervisor of school planning, Maryland State Department of Education, Baltimore; Merle A. Stoneman, holdover executive committeeman, professor of school administration, University of Nebraska, Lincoln; A. B. Grimes, holdover executive committeeman, Iowa State Department of Public Instruction, Des Moines; A. L. Beck, new executive committeeman, Washington State Department of Education, Olympia.

Arnold C. Tjomsland, retiring president, is associate professor of education, Washington State University, Pullman.



John W. Letson, local host for N.C.S.C. convention, is superintendent of the Atlanta city schools, Georgia.



Claude Purcell, luncheon speaker at convention, is the state superintendent of schools for Georgia.



Shirley Cooper, associate executive secretary of A.A.S.A., presented the key address.



How To Classify Lunch Personnel To Cut Down Labor Costs

ROBERT N. MALONEK

Personnel Director, Maricopa County, Arizona; Formerly Personnel Technician for the Phoenix Union High Schools and Phoenix College System

WHEN the Phoenix Union High School and College District determined to operate a cafeteria system that offered high quality food services and still paid its own way, its major task was this: Reduce costly labor hours, but avoid hurting financially as many of the long-time and faithful employees as possible.

A job classification study was begun. Food service jobs were classified according to their relative im-

portance, and hourly rate ranges were established accordingly. This classification actually helped to avoid dissatisfaction among employees who suffered wage cuts because of reduction in labor hours.

A ratio of one full-time employee (8 hour) for every 110 meals served was established for staffing the food service operation. This ratio applied to all cafeteria personnel as well as employees of the district bakery (which

furnished baked goods for the entire cafeteria system), and also to the warehouse man and the delivery man.

Contracts were given to all cafeteria employees who worked for four hours or more each day. A minimum of four hours was thus guaranteed, while provision was stated for additional hours when necessary. Contracts also were given to all members of the regular staff: cooks, assistant cooks, pantry girls, salad heads, cashiers, stand manager, utility man, salad assistants, and kitchen assistants (who worked more than four hours each day). The contracts assured employees of at least a two-week notice before changing the number of working hours for any employee.

Staffing Standards for Food Services Department Year Beginning July 1

I. Administrative Personnel:

Title	Work Year
Cafeteria Supervisor	12 months
Nutritionist	10 months
Cafeteria Managers	9½ months
Bakery Foreman	9½ months

II. Auxiliary Personnel:

Title	Work Year
Secretary IV	10 months
Bookkeeper	10 months
Truck Driver	9 months
Warehouseman	9½ months
Stand Manager	6 hours ¹
Assistant Stand Manager	6 hours ²
Utility Man	8 hours ³

III. Food Production Personnel:

The total number of employees engaged in the production of food shall not exceed one full-time equivalent employee per 110 meals served in each cafeteria. (This category includes the administrative and auxiliary personnel, and includes the bakery staff.)

Title	Working Day
Cook	8 hours
Assistant Cook	6-8 hours
Head, Salads & Sandwiches	6-8 hours
Salad Assistant	6 hours ⁴
Pantry Girl	6 hours
Cashier	8 hours
Utility Man (Men)	8 hours
Kitchen Assistant	3-6 hours

¹Dependent on existence of stand.

²Where shifts overlap.

³A second utility man will be added when more than 700 meals are served.

⁴Salad and sandwich assistant will be added when more than 1000 meals are served.

Promote From Within

Because the number of meals served fluctuates from week to week and from month to month, extra or temporary help is employed for less than four hours and classed as kitchen assistants (our lowest classification). These people are hired with the understanding that their hours will vary according to the number of meals served. However, they are guaranteed a minimum of two hours' work a day, but never more than six hours. They are informed that if their work is satisfactory, they will be given first preference for permanent jobs. Even under these circumstances, the over-all number of employees — including temporary help — does not exceed the ratio of one 8 hour employee per 110 meals served. (Meals are all Type A lunches with choices and some a la carte items.)

This ratio has proved to be realistic. During the last two years when the ratio has been in effect, all cafeteria managers have been able to operate within it — even though our cafeteria services vary from line systems to scramble systems. The ratio, further, works well in cafeterias whose servings vary from 500 to 2000 meals each day.

The accompanying table illustrates our complete allocation of help. ■

DISPOSE OF ALL THESE NUISANCES



messy floors



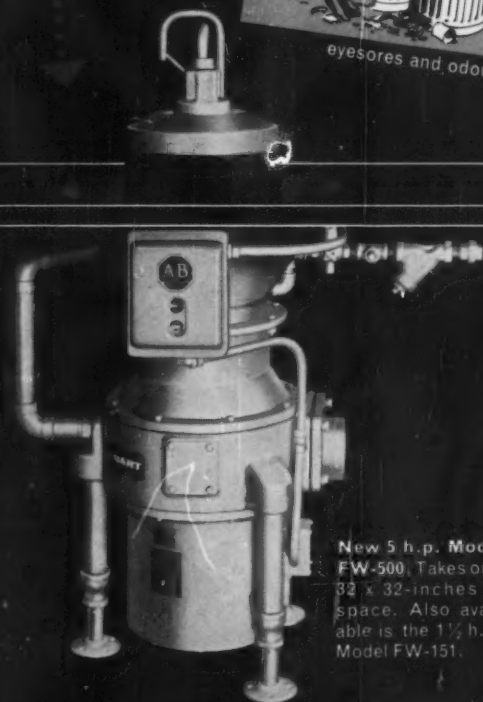
wasted floor space



wasted time and labor



eyesores and odors



New 5 h.p. Model FW-500. Takes only 32 x 32-inches of space. Also available is the 1½ h.p. Model FW-151.

and step up kitchen efficiency with new Hobart 5 h.p. disposer

Now you can change waste handling to a centralized work-saving operation...give your kitchen improved sanitation and efficiency. The Hobart 5 h.p. disposer sends every bit of food waste down the drain—fast, economically, positively! Never before have you seen a disposer with such tremendous capacity...so safe and easy to feed...with so many cost-cutting advantages for you.

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No clogged drains because no dry grinding—Exclusive dual (upper and lower) water injection system starts simultaneously with motor and provides continuous flushing. Disposer automatically absorbs only as much waste as can be safely discharged into drain. Delayed water shutoff provides after-flushing...cleans the disposer...washes away odors. Yet, it never wastes water.

Complete unit—ready to install—This disposer can be readily integrated into any kitchen layout. Legs adjust to desired working height. Installation is simple—needs only one cold-water, one drain, and one power connection.

Cost-conscious buyers will want all the facts to judge this new, big Hobart disposer value for themselves. Use the coupon—no obligation.

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Now PM & E's introduction of the Professional Model LT-100 Dynamic and Student Model LT-500 Magnetic headsets provides a new degree of wide range performance and dependability.

Dynamic and Magnetic acoustic principles have created headsets impervious to humidity and guaranteed resistant to concussion that normally put crystal or ceramic headsets out of commission.

The importance of these outstanding features has been universally recognized as Dynamic and Magnetic headsets have become the first to be accepted in every state.

Whether you are considering the initial installation of a language laboratory or replacement of some of your present headsets, ask your acoustic supplier about the superior technical features incorporated in PM & E's new Dynamic or Magnetic headsets... features that provide exceptionally long term, maintenance-free operation.

Convenience Feature: The Professional Model LT-100 features convenient and time-saving "in the classroom" cord set replacement.

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'Middle Schools'

(Continued From Page 53)

No classroom cells are found in middle school. The architects used the three-sided classroom concept so that classrooms no longer can be thought of as "cells." This openness, the use of glass, and the see-through possibilities have intrigued both teachers and pupils. We have found that it is much more difficult for adults (the public) to adjust to this type of space than it has been for the boys and girls. In fact, discussions and surveys have revealed that the pupils do not wish to go back to the "cells." The freedom and the spatial view have appealed greatly to them.

The availability of quiet spaces, either the individual study carrels or the conference rooms, incorporated with the use of house planning has solved the problem of quiet and noisy activity going on simultaneously within a given house. It is likely that some further acoustical treatment will be done to minimize the transfer of sound across the mall space and the conference and carrel spaces. The three walls of each classroom are utilized as teaching spaces, with chalkboard and tackboard extending from the ceiling to the floor. Each classroom has an outside entrance as well as access through the corridor or mall.

The provision of movable storage cabinets, movable cloak cabinets, book carts, tables and chairs results in the arrangement of the classroom to fit the instructional activity under way. The patterns of arrangement change often.

The classroom in the middle school must serve many purposes. It is a place where boys and girls, in their efforts to acquire information and perfect skills, study, read, write, organize, evaluate and drill. It is a laboratory for physical sciences, in which they study plants and animals, rocks and rockets, and the rest

of their physical world. It is a workshop in which pupils build models, apparatus and other objects. It is a place to see motion pictures and television when these contribute to learning. It is a place for social learning, formal and informal. Committees, individual pupils, and the class as a whole work together on problems. It is a studio where children paint, paste, cut and model. It is a room where children sing and listen to music. Also provided is a sufficient number of individual small group and large group work stations to accommodate all the pupils at any one time in a variety of activities.

The persistent problem of grouping has been faced. "Performance level grouping" is used. Reading ability is the primary determinant for inclusion in a verbal or nonverbal class group. The Iowa Test of Basic Skills is used. The reading scores are converted into percentiles, and, thus, class groups are established by taking a range of reading ability wherever such is possible.

"House" planning for fifth and sixth grades. A typical program for either a fifth or sixth grade proceeds on the basis of "house planning." The teachers in the fifth grade "house" will, in a general way, plan together the language arts program for the week, or the science, social studies, music program, or any given program. This "house" (or team) planning results in strengthening the skills and technics of all involved. Teachers report excellent results. At times, each teacher works with his or her own assigned class group, or the classes are put together in groups of two, three, four or more classes. On other occasions groups are divided into subgroups for specific skill development.

Grades 7 and 8 are housed in a combination of self-contained classrooms for language arts, social studies, group guid-

(Continued on Page 74)

"A SCHOOL FOR GROWING UP"



5TH GRADE

SELF-CONTAINED

"HOME"

ONE TEACHER

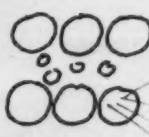


6TH GRADE

INTER-ROOM

"NEIGHBORHOOD"

TEACHER TEAM



7-8 GRADE

BLOCK-TIME PLUS DEPART.

"SOCIETY"

SPECIALISTS

**SPECIALIZED
AREAS**

DEPENDENT CHILD

SELF-ACTUATING ADOLESCENT

PLACE FOR GROWING UP is concept behind middle schools in Saginaw, Mich. Idea is to provide a "transition school" to facilitate growth and development of pupil from dependent child to self-actuating adolescent.

This chair was sentenced to a year of punishment

Summer's sun won't fade or fade it...winter's worst weather won't crack or craze it. Impact testing at 40° below zero wouldn't break it. Virco's new #867 chair is virtually indestructible. A year of torture testing—including over 50,000-cycle life testing—has proved the strength of the 867 and its MARTEST plastic seat and back.

MARTEST, a plastic with a propensity for taking punishment, is molded in our own new plant and is coupled with a heavy gauge steel frame. And MARTEST has at least two other advantages: It caters to student comfort, and it pleases school budgets by lowering the price of plastic to the cost of wood.

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Highland Park, Ill.

(Continued From Page 72)

ance, and foreign language, and in specialized classrooms for mathematics, science, music, unified arts (arts and crafts, homemaking and industrial arts), and physical and health education.

The block-of-time teachers, as they are called, have use of several small conference rooms of different size and student study carrels for all kinds of individual activities. Students have readily accepted self-disciplining responsibilities in the use of individual, small group, and class size activity.

The science program is a program in the development of science concepts, scientific attitudes, scientific methods and scientific inquiry. It is a "do" program. In the centralized middle school, Chippewa, which is built around a court, the court is used by the science classes for all kinds of projects and activities. In the decentralized school an outdoor science area is under development.

The mathematics classrooms are plentifully supplied with various kinds of mathematical apparatus, which are extensively used by teachers. The Yale school study mathematics program has been used rather extensively in Grades 7 and 8. The results are heartening.

Music program attracts many. The music program for the fifth and sixth grade pupils is handled by the classroom teacher with some consultative help from the music teachers for the seventh and eighth grades. The general music program for the seventh and eighth grade pupils is handled by a specialized music teacher. This program alternates with physical education once or twice a week, dependent upon the school.

After three semesters of operation we find that nearly 35 per cent of the pupils are involved in *instrumental music*. This means that the music facilities are taxed to capacity. It will be interesting to know if this high level of participation in instrumental music maintains itself over the coming years. It well may be that this is (1) the effect of deprivation from previous years, or (2) the halo effect of a new and exciting venture. Many teachers and parents suspect that this high level of participation in the instrumental program will be maintained.

The instructional materials center is a storehouse for all kinds of instructional materials. Library books, reference books, textbooks of various difficulties, magazines, newspapers, films, filmstrips, other kinds of audio-visual materials and equipment are available from the center. Teachers and pupils alike select materials from the instructional materials center. This program hypothesizes that book carts are taken to the center and the librarian and pupils select materials to be taken to the classroom. Or such materials may be used in the center. ■

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Bleachers

(Continued From Page 59)

lumber (which had been cut to exact lengths) was bolted into the bleacher framing for air drying in place. About 800 man-hours were required to remove the old lumber and install the new, at a cost of about \$2000. After drying out through the summer, the tops of the boards were painted a light gray color, but the bottoms were left unpainted to permit the wood to breathe.

The treated lumber has a grayish cast. Since the tops of the seats were painted light gray, the casual observer does not notice that the bottoms of the bleacher boards are unpainted. The painting of the top surfaces was done to provide a minimum of slivering and an attractive appearance, but, from a preservative standpoint, it would have been unnecessary. I believe the additional cost of the vertical grain seat boards specified can be justified by the saving resulting from the elimination of the labor required to replace slivery boards, as well as from a spectator standpoint.

Recent careful inspection of our bleacher lumber, installed six years ago, showed it to be in almost as good condition as the day it was installed. I do not anticipate its replacement within the next several decades, and I strongly believe that the added cost for treatment will be covered several times over by the savings on painting and replacement costs.

Preserving Processes. To be effective, the preservative must be driven deep into the wood, adequately and evenly distributed under pressure, and retained (after drying) in sufficient quantity to provide good protection. The impregnated preservative makes the wood toxic to organisms (fungi, termites and many others) that feed upon the wood content, mostly the cellulose which constitutes 70 per cent of wood composition.

The superiority of pressure treatment over other wood preserving processes has been confirmed by intensive experiments of the Forest Products Laboratory, U.S. Department of Agriculture.

Throughout the years the number of approved preservatives has increased. Three classifications of preservatives are listed by the "Manual of Recommended Practice" of the American Wood Preservers Associa-

tion and within Federal Specification TT-W-00571d. The three groups are creosote and creosote solutions, oil-borne preservatives, and water-borne preservatives.

Water-Borne Preservatives. Tanalith is one of nine standard water-borne preservatives used in the pressure impregnation process. The chemical formulation of the preservative is fluor, chrome, arsenate, phenol.

I visited a local plant to observe the full cell treatment process by which the preservative is put into the wood and found it most interesting. The plant has six large horizontal treating cylinders (retorts), varying in length from 105 to 180 feet, each six feet in diameter. Each has a standard gauge railroad track running inside of it.

The lumber is loaded on open cars (trams) and rolled into these large cylinders, which then are hermetically sealed. First the lumber is steamed for about three hours at a temperature of 240 F. Then, a vacuum of about 22 inches of mercury is created in the tank and held for a period of about one hour. (This facilitates entry of the preservative by drawing the moisture out of the wood.) The next step is the introduction of the preservative solution at a temperature of about 100 F., while maintaining the full vacuum on the tank. At the time the tank is filled with the preservative, a pumping operation takes over and hydraulic pressure is built up to the neighborhood of 125 pounds per square inch for one to two hours.

Other Uses. In addition to its use on wood portions of spectator bleachers, treated wood is being utilized in these other school areas: locker room partition framing, where there is a high degree of humidity; sleepers laid on a concrete base under hardwood gymnasium floors; framing of buildings in areas subject to cause decay and termites; sills and similar areas; shop buildings; pole-type construction of agricultural buildings, and overhead roofing for auto parking areas.

There are 377 pressure treating plants located throughout the United States. Water-borne preservative treatment, such as that specified by New Trier, is available in plants located in most states. School systems can obtain details from their local lumber dealer or by writing to the American Wood Preservers Institute, 111 W. Washington St., Chicago 2. ■

Impact and fire resistance are two features of this Polished Misco Wire Glass installation in Tennessee School for the Deaf, Knoxville, Tenn. Architect—Painter, Weeks & McCarty, Knoxville, Tenn.



MISSISSIPPI GLASS...

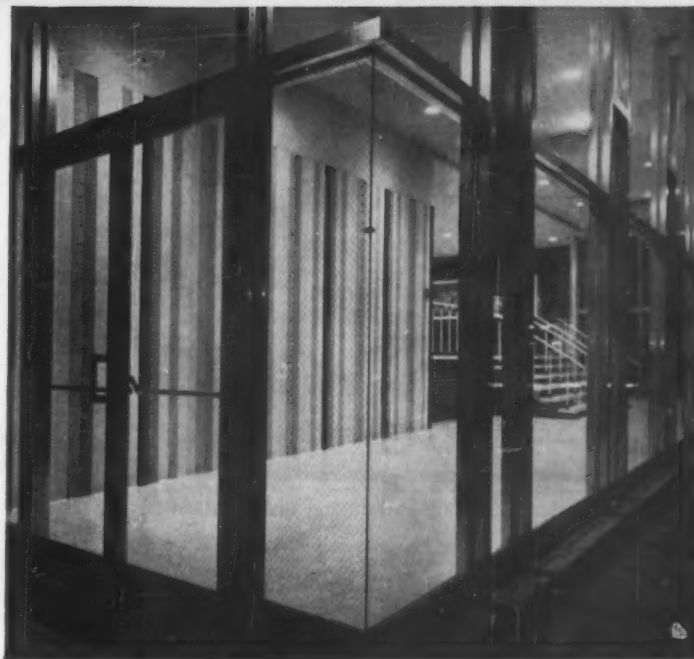
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Polished Misco Wire Glass glazed in main entrance of Hellertown High School, Hellertown, Pa. Architect—Heyl, Bond & Miller, Allentown, Pa. Contractor—Gottlieb-Schneider, Bethlehem, Pa. Glazing Contractor—Penn Allen Glass Company, Allentown, Pa.



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National Council

(Text Continued From Page 68)

light fixture and the kind of flooring to install. Instead members are discussing basic educational principles. This increasingly will be a program trend of future meetings, he believes.

President tells plans for 1962. James L. Taylor, newly elected president, told this magazine reporter that, in keeping with recommendations of the resolutions committee, next year's meeting is scheduled to begin on Monday evening.

A major change also is contemplated by Dr. Taylor in school visitations. Instead of several groups inspecting different structures concurrently, it is planned that all members next year will spend a good part of a day at one school. Different visitors will concentrate on different aspects of the school plant on the basis of interest indicated in advance. Following the viewing of the property, there is to be a clinic on the school premises in which staff members and architects will participate. In this manner Dr. Taylor hopes to tie the visiting more closely to the meeting program.

Among the 1962 group discussion meetings one is to be concerned with the report of the school lighting task force committee. Nationally known lighting specialists will speak.

Newly elected officials of the council, in addition to President Taylor, are: vice president, James L. Reid, supervisor of school planning, Maryland State Department of Education, Baltimore, and a former executive committee member; A. L. Beck, Washington State Department of Education, Olympia, who succeeded Mr. Reid as committeeman.

Holdover executive committee members are: Merle A. Stoneman, professor of school administration, University of Nebraska, Lincoln, and A. B. Grimes, Iowa State Department of Public Instruction, Des Moines. The immediate past president, Arnold C. Tjomsland, automatically becomes an *ex officio* member of the committee.

After accepting 35 new members and removing some names from the list, the National Council has 308 members who spend at least half of their time on schoolhouse planning or teaching in this field. Registered at the annual meeting were 160 members, plus about 50 women guests and visitors. ■

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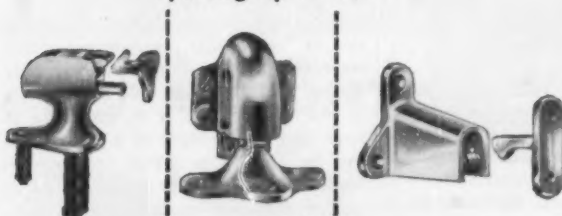


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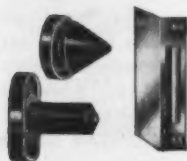
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Looking Forward

(Continued From Page 42)

Professor Reller believes that "educational administration will be recognized as a process which has much in common with administration in other large public enterprises" and that "the responsibility for administration will be carried more largely by a team."

Dr. Reller outlined in detail a planned university program combined with intensive study in the field that would prepare a few highly competent men to become "leaders among administrators."

Considerably less faith in university programs of preparation for the school

administrator (as now practiced) was expressed by Egbert S. Wengert, head of the department of political science at the University of Oregon. Said Dr. Wengert: "Until some of those who administer our educational enterprises learn to act in concert with social scientists, we will have to confess that we have no base for new perspectives on the tasks of training school administrators. . . . Administrators require the most completely organized intelligence our [social] science can produce. . . . Unless the social scientist finds how to communicate with the administrator, we lose in not getting the most out of the scarce talents of the trained investigators."

Dr. Wengert questions whether the selection of candidates for special training in school administration should be left solely to colleges and universities. He comments: "How likely are we to miss the talent that school administration requires when the testing and selecting processes of higher education rely on the crude categorizing of our educational statistics?" Again referring to the shortcomings of higher education, he comments: "Only very superficial observation is needed to conclude that few specialists find energy or interest to relate themselves, their research, their teaching to the world in which the school administrator will work."

"The best single investment we can make in the training of school superintendents is the development of a small but superb cadre of men who will become the needed scholars of the practical," said Dan C. Lortie, lecturer and research associate, Harvard Graduate School of Education. He continued: "Men of original research talent, rare teaching skill, and deep commitment to the optimal performance of our public schools will not be easy to find; to create such a corps will take money, energy and the sacrifice of some of our institutional myopia. . . . With such men, a first-class system of professional education for the superintendency can become a reality."

Dr. Lortie allotted much responsibility to professional organizations to organize and improve the "post-academic learning of the school administrator." One of the things that could be done now, he said, is to raise the standards of their publications and their meetings.

Although the role of the educational administrator encompasses many things, "none stand out with greater clarity than the function of purpose-definition," declared James G. Harlow, dean of the college of education, University of Oklahoma. Dean Harlow defined this function as "seeing that the purposes of the enterprise are accurately and explicitly defined and effectively held up for view by the group. . . . It is unrealistic to hope that all members of a school staff can be equally proficient and equally sophisticated in the problems of setting and maintaining institutional purpose. This is the unique intellectual province of the school administrator; train him for it, we must."

The thesis that "the administration of public education should be viewed as a form of public administration, and public administration, in turn, as a form of general administration," was developed by John Walton, professor of education and chairman of the department, Johns Hopkins University. Said he: "While the curriculum designed for the education of the administrator should prepare him to

(Continued on Page 82)



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two extra keys

KEY-LOCKED FALLBOARD



Looking Forward

(Continued From Page 80)

understand and interpret research literature, it should *not* be designed to prepare researchers or scholars."

In keeping with this point of view, his first recommendation was that "all educational administrators, above the clerical class, should have a broad liberal education. . . . Educational administrators represent to the public the educational enterprise; their general education and cultural background should be better than that of practitioners in other professions."

An "administrative staff college" was proposed by A. D. Albright, provost of the University of Kentucky. Its purpose would be "to provide a program of leadership development for top-level administrators of education." Its students would be mature and experienced administrators. Preferably, the student would be "in the so-called middle range of his career," one who has "gained some kind of professional experience and has developed judgments in the application of his professional skills and knowledge."

Dr. Albright anticipates that the student's employing board would continue his salary and guarantee him a position of equal responsibility upon his return from each three-month program at the university. A sequence of three such programs would be conducted annually for an enrollment limited to 60 selected students. Dr. Albright believes that the establishment of an administrative staff college for education, such as he has proposed, would be a logical activity for the University Council for Educational Administration. He suggests that an experimental plan be tried for a period of five years, at which time an appraisal would be made to determine the feasibility of continuance.

In our opinion, there is one essential for success in school administration that precedes all others. It is the ability to work *with* and *for* a school board. All the culture, skills and experience possessed or acquired by the potential leader in school administration are of no avail if he is unable to work effectively with a school board. — A.H.R.

Making the Most. Handmade bricks of clay are responsible for a boom in school construction in Liberia. One hundred new schools will be possible through use of the bricks, 20 of which can be made for the price of one cement block. The soil of Liberia contains a heavy clay element. A mixture of the soil and cement or lime is compressed by a hand-operated, portable press. Villagers were trained how to make and lay the bricks by U.N. technicians. The school construction program is part of a self-help project of the United Nations.



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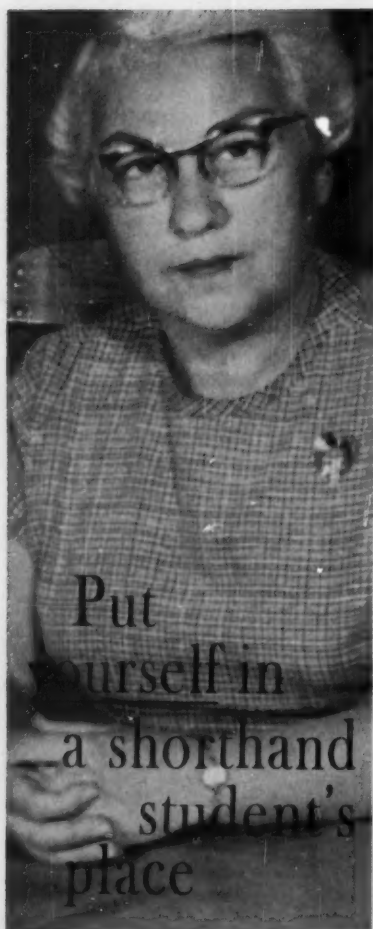
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Report

from WASHINGTON

By EDGAR FULLER

New plan for federal aid proposed by Rep. Bailey; based on state, local expenditures for education

Rep. Cleveland M. Bailey of West Virginia, chairman of the House subcommittee on general education, has fought for federal financial assistance to education as vigorously as any member of Congress. Now he has rebounded from the recent House defeat on the public education bill with a new approach for next year. His basic innovation is a distribution formula for federal funds based upon present state and local expenditures for public education in the states. His purpose is to use the broader federal tax base to help state and local taxpayers finance the cost of improved education.

In addition to the new formula, Representative Bailey calls for simplified federal administration and complete state autonomy in using and reporting for federal funds. The administrative principles are similar to the pattern used by the land-grant colleges and incorporated in H.R. 2365 of 1959, introduced by Rep. Stewart L. Udall of Arizona and sponsored by the Council of Chief State School Officers. A tentative bill incorporating these principles has been informally approved by Mr. Bailey.

New Formula. The draft bill would authorize a basic allotment to each state of an amount equal to 2 per cent of the total state and local expenditures for public education in the latest year for which data are available. An additional equalization allotment would be made to each state having an average per capita personal income below the national average, computed as three times the difference between the average national income and the average income of each of these states. Thus, if a state has an average per capita personal income 25 per cent below the national

average, it would receive an additional 75 per cent of its 2 per cent basic allotment, or a total allotment equal to 3½ per cent of its state and local expenditures for public education.

Statistics show that the range of appropriations among the states would be 2 per cent of their respective expenditures for the 19 states having above average per capita personal incomes, up to nearly 5 per cent for the least wealthy of the 31 remaining states. The factor of 3 in the formula could be adjusted to produce more or less equalization as desired. A provision for special projects such as those needed in the slum districts of large cities probably will be added.

The draft bill would authorize about \$375 million annually to supplement approximately \$5.5 billion of state tax funds, and more than \$8.5 billion of local tax funds now expended for public education. This would be less than 3 per cent of the state and local total, or about 7 per cent of the state aid alone.

Administrative Provisions. The Bailey bill would authorize the states to expend the federal funds for public elementary and secondary education, which is defined as kindergarten and the 12 grades beyond the kindergarten. It includes a penalty clause to encourage maintenance of state and local financial effort, borrowed in the form approved by the House committee on education in 1961. The Bailey proposal also has a built-in reward for extra effort by states and local school districts, because their federal allotment for the next year is based on their own increased expenditures for the current year.

The federal funds would be paid to the states in quarterly installments and would supplement state funds appropriated for public elementary or secondary schools and distributed to local school districts under state law. The fed-

(Continued on Page 86)

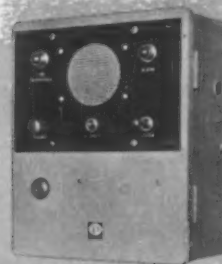


South East School... Monday, 9 A.M.

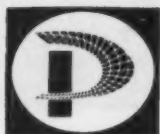
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Report From Washington

(Continued From Page 84)

eral statute would specify that, after receipt by the state, the federal funds would become state funds. Each state could then distribute the funds under its own state aid system in its own way, using the part of the state aid system that would allocate the funds where most needed.

The average state has several formulas in use for the distribution of various state aids, and most states would have a fairly wide range of choices under present laws. If none of its present state aid programs seemed satisfactory, the state could authorize new provisions for allocation.

The draft bill provides that each state shall make a complete report to the U.S. Commissioner on how the federal funds have been received, distributed and expended not later than the October 31 following the close of each fiscal year on June 30. The Commissioner would be authorized to accept, with the consent of the general accounting office, the normal accounting procedures used in each state to account for state funds expended for public education. The Commissioner would be required to transmit all such state reports to the Congress, together with his recommendations for the next fiscal year, before the January 1 following the close of each fiscal year.

The federal officials would have no administrative discretion in computing the allotments, remitting the funds to the states, or transmitting the state reports to Congress showing how each state distributes the federal funds and accounts for their educational uses.

The Issue of Federal Control. The Bailey bill should reassure all who honestly fear federal control of education through federal grants in aid. Some of the most adamant opponents of such inter-governmental financing of public education have been willing to leave a small portion of federal income taxes for this purpose in the states where the taxes are collected, thus avoiding possible federal control by eliminating all federal administrative handling of the funds except that of the federal tax collecting agency.

The best constitutional opinion appears to be that such transfer of federal tax funds to the states in which they have been collected is a violation of the constitutional rights of the House of Representatives to initiate and of the Congress to appropriate funds for federal expenditures. We are convinced that such a limitation is both the law of the Constitution and an imperative of sound fiscal policy, and that the maximum protection that can be constitutionally enacted to prevent any federal control of education in connection with financial support is

to be found in the provisions of the Bailey bill.

NEW VERSION of Catholic position on federal aid suggests moderation of present stand.

Richard Cardinal Cushing of Boston wrote on October 21, in his regular column in *The Pilot*, official newspaper of his archdiocese, a version of the Catholic position on public and private school financing that could signify a new approach.

The Cardinal began with the biblical account of how the Pharisees and Herodians had sought to entrap Christ with a question about taxation to which Christ had answered, "Render, therefore, to Caesar the things that are Caesar's, and to God the things that are God's." Then Cardinal Cushing applied the parable as follows:

"In answering the current church-state question in a manner, as near to Christ's reply as I can fashion, I would say: If you are honestly convinced that government aid to parochial schools is forbidden by the Constitution and against the best interests of the country as a whole, then fight to maintain your position. If you are against federal aid to private education for the sole reason that the Catholic church might gain an advantage in this country and you dislike the Catholic church, then an examination of conscience should measure you for what you are.

"If you are a Catholic, and demand federal aid to parochial schools for the sole reason that it will lighten your tax burden in supporting the schools your conscience tells you your children should attend, then you, too, are including a wrong motive.

"I want no part of government aid to private education that would reach the ultimate conclusion of government control of such teaching.

"While I am not convinced that the Constitution forbids all subsidies to private education, I feel that as long as the majority of the American people are against such use of taxes, Catholics should try to prove their right to such assistance, but neither force such legislation through at the expense of national disunity or use their political influence in Congress to block other legislation of benefit to education because they do not get their own way."

This writer believes Catholic opposition to federal public school financing may really be in process of moderation, and that the views of Cardinal Cushing may yet prevail over the adamant position identified with Cardinal Spellman of New York. The depth of any such new approach will soon be tested in Congress.

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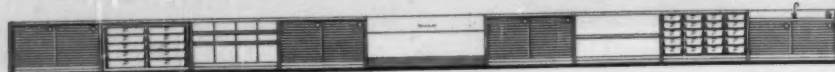
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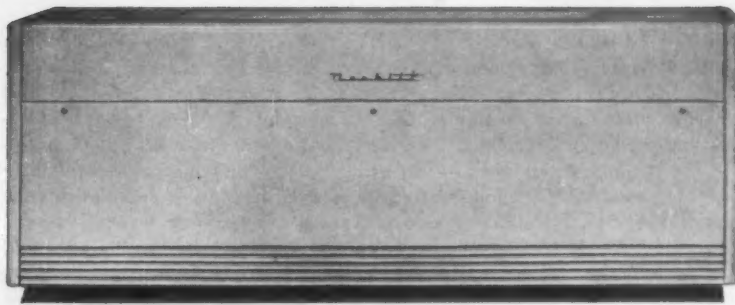
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News in Review

A.A.S.A. Selects Speakers for February Convention

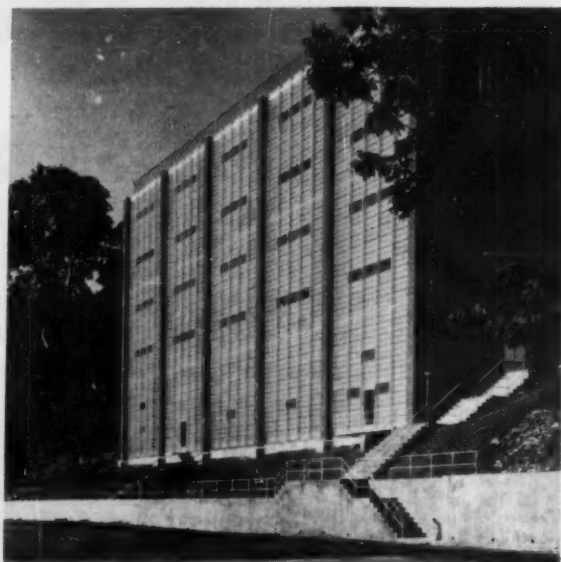
ATLANTIC CITY. — U.N. Undersecretary Ralph J. Bunche will address the second general session of the annual convention of the American Association of School Administrators, to be held here February 17 to 21. The story of the National Aeronautics and Space Administration will be told at the fourth general session by its administrator, James E. Webb.

Speakers that have been scheduled for the seminars on 14 goals for America and how schools can help achieve them include:

Arthur W. Foshay, executive officer of the Horace-Mann Lincoln Institute of School Experimentation, Teachers College; U.S. Secretary of the Interior Stewart L. Udall; U.S. Senator Maurine B. Neuberger of Oregon, and U.S. Representative James Roosevelt of California. The 14 topics are based largely on "Goals for Americans," report of the President's Commission on National Goals.

Chairman of the organization's 1962 resolutions committee will be Paul D. West, superintendent, Fulton County, Atlanta. Approximately 90 discussion groups will meet during the five-day national convention.

NEW \$1.5 million glass walled gymnasium at Riverdale, N.Y., Country School is embedded against 75 foot hill and connects school's main buildings with playing field below. Designed by New York Architect R. Marshall Christensen, new building provides full athletic facilities for 450 students and is divided into four major areas on separate levels: gymnasium, locker rooms, natatorium and maintenance area. Shown in picture, entire east wall of building — 125 feet high, 85 feet wide — utilizes solar selecting glass curtain wall in soft green shade. Ventilation in prefabricated wall system is provided by two rows of window vents set on each level. Locker and shower rooms are located at rear of building on split-level arrangement, located between the pool and gymnasium for access to either level. Maintenance rooms are on ground level below pool deck, with boiler room and filter room at alternate ends of building. The natatorium, located on center level, contains 75 by 42 foot pool with spectator area for 300, coach's office, and a loud-speaker system. The building has flat roof.



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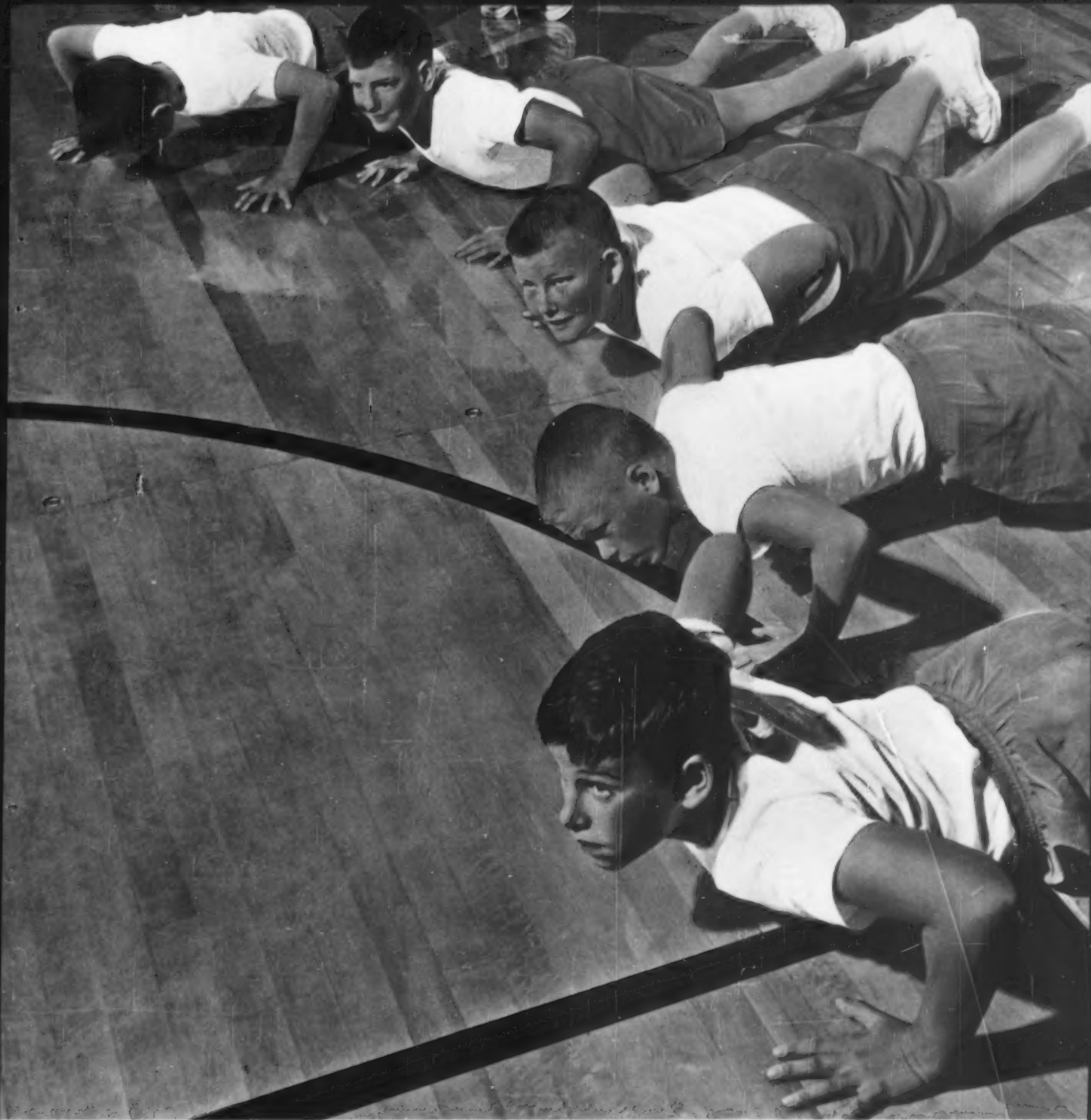
WASHINGTON, D.C. — The president-elect of the A.A.S.A. will be chosen from these candidates (listed alphabetically), nominated by mail ballot: Evart W. Ardis, Nathan W. Burbank, Harold Richards. Mr. Ardis is director of the bureau of appointments and occupational information, University of Michigan. Mr. Burbank is superintendent, Boulder (Colo.) Valley Reorganized District. Mr. Richards is superintendent, School District No. 218, Blue Island, Ill.

Other nominees are: for vice president — J. Win Payne, supt., Ponca City, Okla.; Nolan Pulliam, supt., Stockton, Calif.; Harold Vincent, supt., Milwaukee.

For member of executive committee (four-year term) — John B. Geissinger, supt., Tenafly, N.J.; T. Joseph McCook, supt., Springfield, Mass.; Warren Phillips, supt., Valparaiso, Ind.

Reports Growth in Number of Buses and Pupils Transported

WASHINGTON, D.C. — In the school year 1959-60, 679,617 more pupils than in 1958-59 were transported to school at public expense. The cost also went up by \$32,799,533 for the same period, according to figures from the U.S.O.E.



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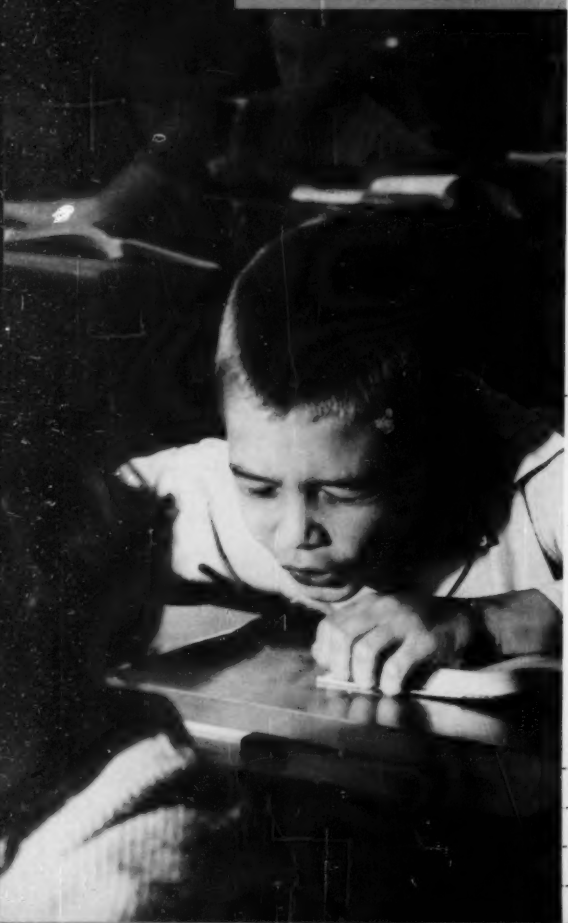


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One more important point. Huntington has a wide range of school sanitation and maintenance products. Why so many? Because we believe a product created to do a *specific* job will do it better and at less cost. Because our experienced representative, the Man Behind the Huntington Drum, needs this vast arsenal of sanitation and maintenance specialties to select the products that will best solve *your school's* problems. Write or call us for the name and address of the representative nearest you. Please do it today.

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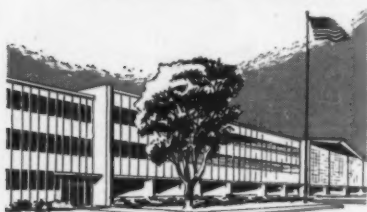
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Safety Specialists Call for More Driver Training

CHICAGO. — Since teen-agers suffer more traffic fatalities than any other age group, it is no surprise that safety through driver education occupied many school sessions of the 49th annual convention of the National Safety Congress, held here October 16 to 20.

Every year, about 11,000 school-age youths die in traffic accidents, according to the National Safety Council. And unless there is more emphasis on teaching driver education and traffic safety, the schoolmen were told, more teen-age accidents are likely to occur. In another decade four million youths will reach driving age every year, as compared with two million now.

Hideya Kumata, associate professor at Michigan State University, called for more effective teaching of traffic safety. The greater the shock appeal, the less the learning, he said. If students view a shocking accident on the screen, for example, they may disassociate themselves from the accident, or the shock may be so strong that they forget about everything else. Thus, if the strength of the shock is high, then the strength of the safety precaution measures proposed must be equally as high for effective communication, Dr. Kumata cautioned.

W. K. Streit, director of health and safety services, Cincinnati public schools, discussed the implications of teaching driver education by television in his city. In 1958, he said, a study was conducted whereby control classes of students who were not exposed to educational television were set up to match experimental television classes of 175 to 200 students in a single room. Mr. Streit reported these findings:

"Achievement of students in driver education, as measured by objective tests, was superior in those classes which received instruction by television. The differences favoring television instruction were statistically significant with students of above average ability but lacked significance for students of below average ability."

Practice on an auto-trainer can be substituted for behind-the-wheel driving practice without affecting the driving skills developed, according to Lewis M. Heeter of the Beaver Falls Area School District, Beaver Falls, Pa. This was the conclusion of a study conducted in a city high school in 1959-60, he said.

William C. Harris, superintendent, Allen Park, Mich., explained that Michigan's driver education program is one part of a five-part safety program enacted by legislation in 1955. In this program, the three methods used to teach behind-the-wheel driving are on

(Continued on Next Page)

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(Continued From Page 93)

the street, driving range, and driving simulator.

In 1955, the death rate in Michigan was 7.1 persons per 100 million miles of travel, explained Mr. Harris. The National Safety Council estimated that the average cost of a fatality is \$150,000. Since the safety program has been initiated, said Mr. Harris, about 2871 lives have been saved in the years 1956 to 1960. This is a saving of \$430,650,000. Michigan's total cost of training 402,051 students during these five years cost \$16,082,040, using an estimated cost of \$40 per student. Thus, driver education cost Michigan 3.73 per cent of the money saved in fewer fatalities.

Higher standards for obtaining and retaining a driver's license were recommended by Alfred L. Moseley, chief investigator for the research on fatal highway collisions program of Harvard University's department of legal medicine.

No motorist should receive a license until he has been trained to handle simulated highway emergencies, and even then he should not be allowed to carry passengers for a year, Mr. Moseley proposed.

Mr. Moseley said that without subjecting drivers to actual hazards, they should be placed in such "test situations" as loss of brakes, loss of ignition, loss of steering power, soft or flat tires, sudden stops, and skidding.

A paper on driver simulators, prepared by Robert Fraser, traffic safety analyst, Torrence, Calif., was read by T. A. Seals, Florida State Department of Education. The four purposes of simulators, according to Mr. Fraser, are research, driver training, driver testing, and demonstration of driving performance.

As to the nature of a car itself, John F. Gordon, president of General Motors Corp., said "it is completely unrealistic even to talk about a foolproof or crash-proof car. . . . We can only design into it the greatest degree of safety that is consistent with other essential functional characteristics. Beyond that, we must depend on intelligent use."

Perhaps the best current solution to accident prevention was offered by President Howard Pyle:

"We will never know all the answers to anything as complex as the challenges with which we are faced in accident prevention. But we certainly will deserve the stigma of failure and neglect if we are ever slow about acting with the full strength of what is already known."

"Time and further research must improve on our plans for the future, but, in the meantime, if a single death or injury occurs simply because any of us is waiting for a more perfect answer . . . we would deserve the most critical of judgments." — M. WENGER



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This microphone is different – it's wireless!

We call it the Vega-Mike.* It looks somewhat like an ordinary lavalier-type microphone. But there is no trailing cable to restrict your movement. Nothing to get entangled, to kink or cause awkward interruptions.

The wireless Vega-Mike frees you to walk anywhere in the auditorium or classroom, face any direction, even turn your back to the audience... yet have every word you speak distinctly amplified.

It's a one-piece unit, so lightweight (only 7½ ounces) you're hardly aware of wearing it. Its size is only 1" by 5¼" long. Within these miniature dimensions are contained a mercury-cell battery power supply, a fully professional broadcast-quality dynamic microphone, and a transistorized wide-band FM transmitter.

The Vega-Mike transmits through the air to its matching specially designed portable receiver, which is simply connected to a public-address system amplifier, tape recorder, or other similar equipment.



Lavalier Vega-Mike

Hand-held Vega-Mike

Vega-Mike Receiver



VEGA ELECTRONICS CORPORATION

Designed and manufactured in the United States, the Vega-Mike Wireless Microphone System is sold worldwide only through franchised Vega dealers. For a free six page brochure describing this equipment, and for the name of the closest Vega dealer (who'll be pleased to give you a no-obligation demonstration) write to VEGA ELECTRONICS CORPORATION, P.O. Box 145-D, Cupertino, California.

*TM REG.

FROM ALL AROUND . . .

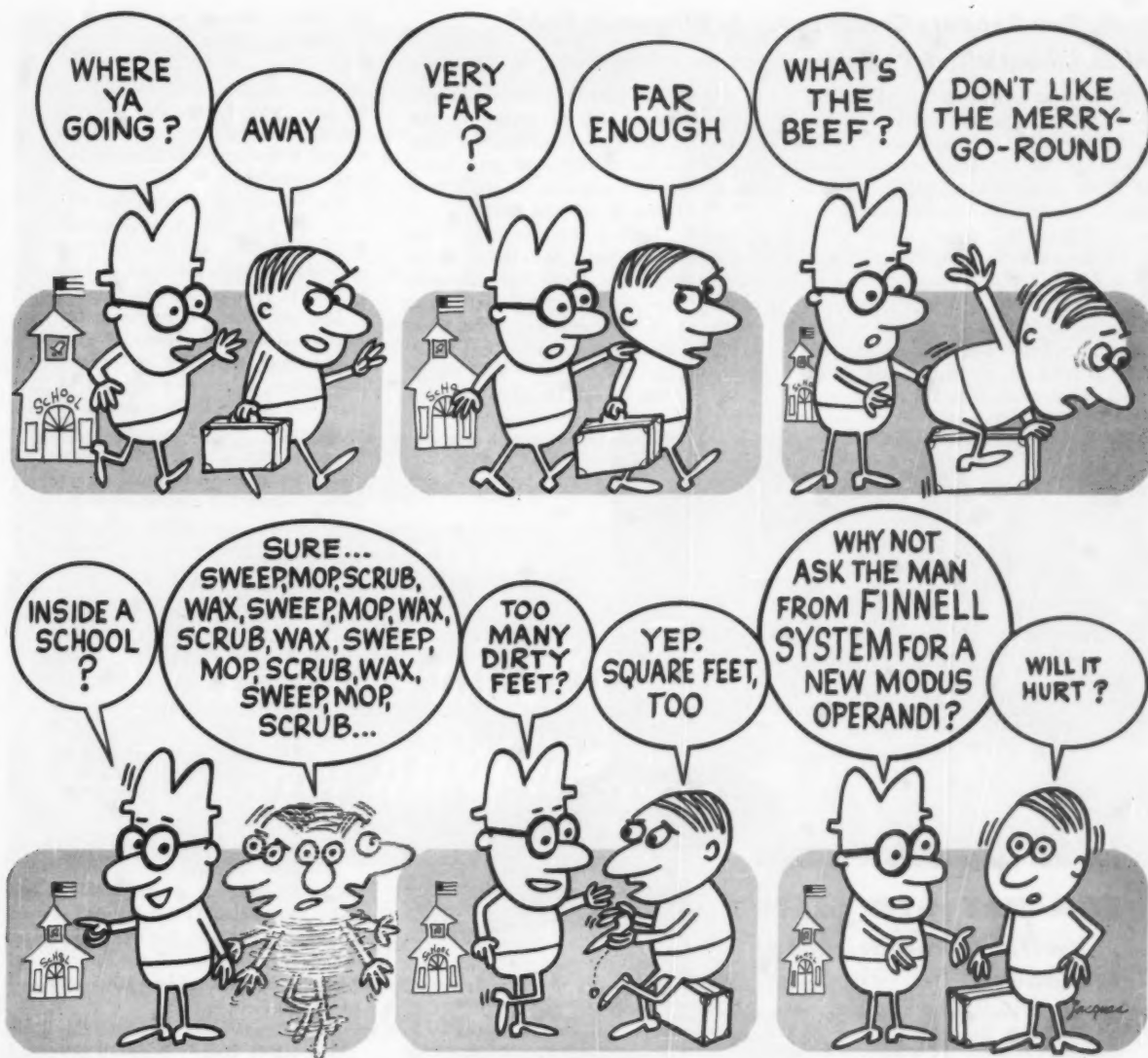
Five half-hour television programs on communism have been scheduled for high school juniors and seniors in four New England states. The programs are being sponsored by an adjunct of the Massachusetts state department of education and the World Affairs Council of Boston. . . . Noninstructional employees of public schools in Hillsborough County, Tampa, Fla., are wearing special school uniforms in their jobs this year. Supt. J. Crockett Farnell is pleased with the plan, which he expects will improve morale of these employees. The uniforms cost the average employe about \$30 less than work clothes cost him last year.

Electronic language laboratories increased in number from 64 in all high schools in 1958 to more than 2000 in 1960, according to the U.S. Office of Education. . . . A \$37,000 grant from the Fund for the Advancement of Education will support continuation of a cooperative program aimed at helping Ohio high schools to offer college-level courses to superior students and to promote acceptance of the program by colleges in the state.

An Age of Kings is a series of ETV programs devoted to Shakespeare's historical plays, presented in a continuous, unified performance by a British cast of players. . . . The United Nations General Assembly has named its new library the Dag Hammarskjöld Library. . . . Seventy-two per cent of the teachers surveyed in an N.E.A. poll favor "the judicious use of corporal punishment as a disciplinary measure."

Five school districts have been selected by the National Association of Public School Adult Educators to receive funds for broadening and enriching their adult education programs. They are East Aurora, Ill.; Baltimore County, Maryland; Herkimer and Poughkeepsie, N.Y., and Warren, R.I. . . . About eight million adults are involved in some form of adult education, according to N.A.P.S.A.E. . . . Putting it to the potential dropout this way may change his mind: The average boy who leaves high school before he graduates will earn \$46,364 less in his lifetime than will his graduating classmate. The research division of the N.E.A. says so.

TV Prep. St. Louis city and county school systems and the public library system are cooperating in a project that provides local students with reading lists based on the content of selected television programs. A St. Louis television station in October began the TV reading service designed to stimulate student reading and to assist them in selecting programs. Initial reading lists covered, for example, "Eisenhower on the Presidency," and "The Water Famine."



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McGuffey Readers Controversy in Wisconsin Ends With School District's Using Them as 'Reference' Only

TWIN LAKES, WIS. — The McGuffey readers have been the center of a controversy here between the board of education and the Wisconsin superintendent of public instruction. According to newspaper reports, the board accused the state superintendent of usurping its "right to select books to be used in its local school system."

Allegedly, State Supt. Angus B. Rothwell disapproved of the McGuffey books as either a basic text or a co-basic text for the teaching of reading and threatened to withdraw state aid if they were

used for those purposes. Newspaper accounts quoted him as saying to the board that the state department of education has "no objection to your using the readers as reference to show how different textbooks were in 1879."

Further, he said that the readers are "totally out of date," and lack "all the developments that have been made in reading over the last 50 years." In a statement to the local board, he listed examples of sectarian material and errors in grammar and archaic word usage found in the books. He also said that

the subject material was "almost totally unrelated to modern living."

The president of the board said it favored the McGuffey books "because we have gone to the full phonetic approach in reading. We had difficulty in finding a textbook which used the phonetic approach."

The board said it had relied on state laws which "give it responsibility to adopt textbooks" and that it "stands irrevocably for the principle of local autonomy as opposed to state dictatorship."

The director of research for the American Book Company, New York, publisher of the 1879 McGuffey series and owner of the copyright, told *The Nation's Schools*: "We do not recommend these 1879 books as a text for basic reading or as a co-basic text, but rather as books that would be suitable to supplement the curriculum for purposes of moral training and character building." The company representative said "back in the middle of the Nineteenth Century these books met the needs of the time. Rapid reading was taught much differently in those days." He hoped that the books would not be confused with its 1956 Golden Rule series of McGuffey readers.

Sale of the McGuffey readers went over 120 million copies during the period from 1836 to 1920. Now the 1879 series sells more than 30,000 copies a year to libraries, to members of McGuffey clubs, and to various individuals.

A later newspaper report states: "State School Supt. Angus Rothwell said today [November 1] the dispute between his department and the school board at Twin Lakes over use of the controversial McGuffey's readers has been resolved to his satisfaction."

"In a conciliatory letter to the Twin Lakes school board, Rothwell reiterated that the readers can be used as reference books, and he denied there had been any threat from his office to cut off state financial aid to the feuding village."

A footnote to the story was added on November 7 when the Associated Press reported that Raymond J. Oestreich, principal of the Lakewood School in Twin Lakes, has been suspended by the board, allegedly for expressing opposition to the McGuffey books.

The board has reportedly warned Oestreich to stay home or risk the loss of his salary. Oestreich is reported to have told reporters that he has been advised by the Wisconsin Education Association to comply with the board's orders.

No Additional Cost. A fallout shelter is being built into a new New York high school at no additional cost, architects of the building claim. The school was designed with higher crawl space, which is left unfinished and can be used as storage or shelter area.



NEENAH, WIS.
Junior
High School
selects ...

**EZ-A-WAY
GYM SEATS**

... the *New* MODEL D-1200
EZ-A-WAY GYM SEATS
... with automatic rear
footboard

One of the outstanding features in this new installation is the automatic rear footboard that operates when the gym seats are opened and closed . . . prevents basketballs from lodging at the top.

Another feature is the 18' long sections, in which the steel support structure is matched with longer boards to provide fewer sections yet has greater stability because there are fewer sections to operate . . . this results in a savings to the school.

The new model D1200 EZ-A-WAY Gym Seats illustrate the constant development made in design and manufacture of EZ-A-WAY mechanical folding bleachers . . . pinpointing why each installation is custom-built to the requirements of a particular school. That is why EZ-A-WAY bleachers are preferred by schools throughout the country. The true "floating action" developed by Berlin Chapman Co. is an innovation that has never been successfully copied. EZ-A-WAY bleachers are offered in many combinations and arrangements.

WRITE for complete details and engineering data to assist you in deciding the best type bleacher for your requirements . . . ask about installations in your area so that you may check their performance.

BERLIN CHAPMAN CO.
BERLIN, WISCONSIN



Illustrated above are the 4 sections of Berlin EZ-A-WAY gym seats 14 rows, 18' long to provide adequate seating.



The automatic rear footboard is one of the distinctive features. When the gym seats are opened and closed this automatic footboard prevents basketballs from lodging at the top.



Illustrated is one of the six ceiling suspended series no. 100 Berlin basketball backstops . . . installed in the gymnasium at the same time as the gym seats.



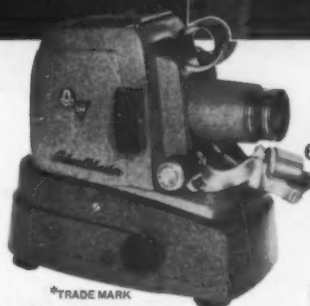
What two words did you hear in each word?

Frame shown is from a set of six filmstrips, "Phonics—A Key to Better Reading" by Society For Visual Education*, Inc.

*How to focus on phonics
... yet make learning a TREAT!*



PHONICS can be a boring struggle for students and teacher alike. To dispel this drudgery, a teacher combines today's compelling filmstrips with class participation. After introducing a filmstrip to her reading group, she permits the children to individually review the strip for the class. Each pupil takes pride in being part of the project—finds learning phonics can be fun—and develops presence and confidence by speaking in front of the class.—Just one example of how filmstrips or slides, plus a measure of creativity, can make dull subjects vivid, living and interesting. For a wealth of helpful information send for the 48-page Graflex Audio-visual Digest, containing leading AV articles from the past three years. 25¢ per copy. Free to AV directors.



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economy, convenience
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SCHOOL MASTER
...the
FOUR-IN-ONE Projector

■ **It's a Filmstrip Projector.** Simplified threading, framing. Precise advance without backlash. Operates from right or left. Twin aperture plates hold film at correct optical angle. Exclusive accessory rewind take-up automatically rewinds filmstrip into storage can. ■ **It's a 2 x 2 Slide Projector.** Low-cost accessory slide changer attaches in seconds, without tools. No need to remove changer while filmstrip is projected—or to remove filmstrip gate while projecting slides. Accessory magazine slide changer shows slides in sequence—without handling. ■ **It's a Microscope Slide Projector.** Accessory "Micro-Beam" unit attaches without tools. Projects standard dry-mount lab slides in crisp detail up to 300X magnification. Greater illumination than conventional microprojectors. No need to darken room completely. Check-stop aperture disc permits concentration on specific sections of specimen. ■ **It's a Tachistoscope.** Accessory "Speed-I-O-Scope" attaches without tools. Permits flash exposure of various visual stimuli. Accurate control of exposure duration, intensity and duration of stimulus. Ideal for memory training, improving reading speed, arithmetic, language, etc.

School Masters, available in 500 and 750 watt manual or remote control models. For additional information, see your Graflex AV Dealer. Or, write Dept. NS101, Graflex, Inc., Rochester 3, N.Y. In Canada: Graflex of Canada Limited, 47 Simcoe Street, Toronto 1, Ontario.

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About People

Changes in Superintendencies

NORTHEAST

John J. McKenna Jr., assistant superintendent, Princeton, N.J., to superintendent there.

Edward Moyer, assistant superintendent, West Hempstead, N.Y., to superintendent there.

John B. Wahl, acting supervising principal, Freedom, Pa., to supervising principal there.

Rev. George E. Murray, assistant superintendent, Catholic Diocese of Man-

chester, N.H., to superintendent there.

Francis G. Ciarfella, principal, Tewksbury, Mass., to superintendent, Rutland-Windsor Supervisory Union, Rutland City, Vt.

MIDWEST

Allen N. Stroh, Garner-Hayfield Community School District, Garner, Iowa, to Carroll, Iowa.

Richard L. Miller, Mazeppa, Minn., to Le Center, Minn. He succeeds John A. Schoen, who goes to Slayton, Minn.

Lenard L. Woods, Wilson, Kan., to Rozel, Kan.

Philip K. Williams, Southwest Local School District, Fort Recovery, Ohio, to

Madison Local School District, Groveport, Ohio.

C. M. Patterson, Bay Village, Ohio, to Steubenville, Ohio.

John J. Fedta, Villard, Minn., to Shakopee, Minn.

Edward E. Heathcote, principal, East Side School District, Niles, Mich., to superintendent, Marcellus, Mich.

John Coil, high school principal, Pana, Ill., to superintendent there.

SOUTHEAST

Silas B. Cross, coach, Chalybeate Junior High School, Hillsboro, Ala., to superintendent, Lawrence County, Moulton, Ala.

C. V. Snapp, Jenkins, Ky., to Pikeville, Ky. He succeeds Harry A. Banks, who has accepted a position with Kanawha County, Charleston, W. Va.

WEST

William G. Ward, assistant superintendent, Idaho Falls, Idaho, to superintendent, Eastside School District No. 201, Preston, Idaho.

Stephen Stivers, principal, Cascade Locks, Ore., to superintendent, Sheridan, Ore.

Lawrence Hultz, assistant superintendent, Glenn County, Willows, Calif., to superintendent, Clarksburg, Calif.

George Wayne Foster, graduate teaching assistant, University of Oregon, Eugene, to superintendent, St. Helens, Ore.

Bruce Moore, Phoenix, Ariz., to Downey, Calif.

Wilbur M. Beal, elementary principal, Sierra School, Lancaster, Calif., to superintendent, Soledad-Agua Dulce School District, Acton, Calif.

Other Appointments . . .

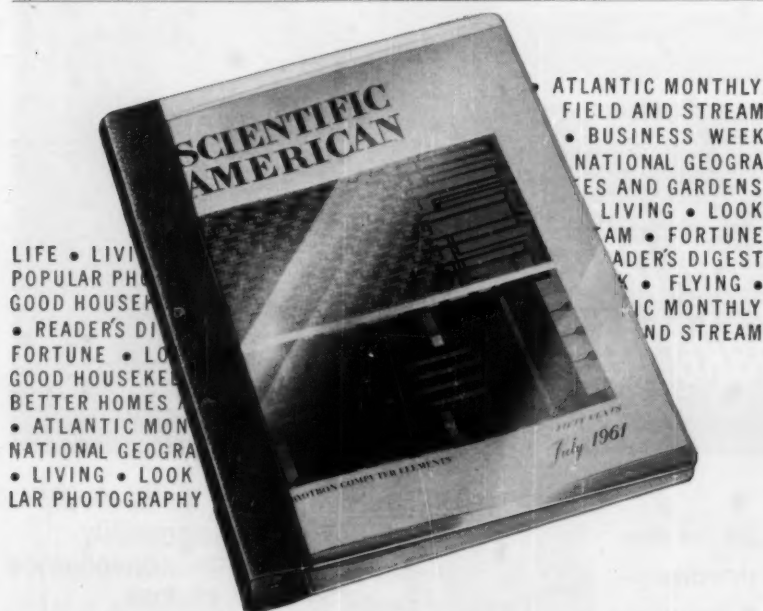
John W. Renner, associate executive secretary since 1959, National Science Teachers Association, to associate professor, college of education, University of Oklahoma, Norman, effective January 1. He has been assistant professor of education at the University of Illinois, Urbana, and at Creighton University, Omaha, Neb.

Roy M. Hall, chairman of the department of instruction and curriculum, college of education, University of Texas, Austin, will become dean of the school of education, University of Delaware, Newark, effective February 1. He also has served as assistant commissioner for research of the U.S. Office of Education.



Roy M. Hall

(Continued on Page 102)



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PHONE JORDAN 9-2469

February 27, 1961

DeCelle Company, Inc.
4040 W. 126 Street
Brookfield, Wisconsin

Attn: Howard W. Harper

Re: Burgess-Manning Ceilings

Gentlemen:

As you know, we designed and supervised the construction of two schools purchasing Burgess-Manning Ceilings, both for heating and for ventilating purposes. These schools were St. John's Ev. Lutheran School at West Bend and the first section of the new Evansville High School. The owners have been well satisfied with the operation of these systems.

The addition to our own office is also heated by a Burgess-Manning Ceiling, which has proven to be entirely satisfactory, and eliminated any type of wall hung or free standing units, which in our case would have been impractical. The use of any type of hot air system was also ruled out, because of the type of construction which we selected. In our office, the Burgess-Manning Ceiling provides both a heat source as well as an acoustical installation, combining the qualities of utility and low maintenance in one completely unobtrusive system. We feel this is a highly satisfactory solution to our heating problems. The entire office is almost completely devoid of structural tie between the lower and upper sections, making piping and duct work extremely difficult to introduce. With the use of the Burgess-Manning System, it required only four mechanical ties which are visible in the building. Two of these are one inch pipes supplying hot water to the ceiling system and these are almost invisible because they are over a projecting architectural shelf at the entry.

We are presently working on the design of a large high school. This will also utilize the Burgess-Manning Ceiling in all areas except the gymnasium and shop. We are so sold on this method of heating and ventilating in school buildings that we are at the present time contemplating its use in several additional buildings now in the drawing stage.

We certainly appreciate your efforts in keeping us informed of new methods of procedure and design as well as cooperating with us whenever help is needed in developing new approaches to the use of this system.

Yours very truly,

WATERMAN, FUGE & ASSOCIATES, INC.

Karl W. Fuge

Karl W. Fuge, Professional Engineer

KWF:al
encl.

—Karl W. Fuge, Engineer A.S.C.E.
Waterman, Fuge & Associates, Inc.

First hand experience—an installation in their own office—is a solid enough reason why Waterman, Fuge & Associates, Inc. are "sold" on the Burgess-Manning Radiant Heating, Cooling and Acoustic Ceiling.

And . . . this is why this prominent Wisconsin architectural and engineering firm are continuing to utilize the Burgess-Manning Radiant Ceiling on their jobs now in the drawing stage . . . and, of course, on their future jobs, too.

For better buildings . . . with the budget no bigger . . . specify the Burgess-Manning Radiant Heating, Cooling and Acoustic Ceiling . . . it has many real dollar-and-cents advantages and assured design flexibility.

Today . . . write for complete literature, specifications, etc. Ask for Bulletin 156 . . .



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☆☆☆ not beaten there by the hammer & sickle, but FREELY, INTELLIGENTLY, RESPONSIBLY, CONFIDENTLY, POWERFULLY. America now knows it can destroy communism & win the battle for peace. We need fear nothing or no one... ...except GOD.

OUR  FATHER IN HEAVEN:

WE PRAY that YOU save us from ourselves.

The world that YOU have made for us, to live in peace,
we have made into an armed camp.
We live in fear of war to come.

We are afraid of "the terror that flies by
night, and the arrow that flies by day,
the pestilence that walks in darkness
and the destruction that wastes at noon-day."

We have turned from YOU to go our selfish way.
We have broken YOUR commandments
and denied YOUR truth. We have left YOUR altars
to serve the false gods of money and pleasure and power.

FORGIVE US AND HELP US

Now, darkness gathers around us and we are confused
in all our counsels. Losing faith in YOU,
we lose faith in ourselves.

Inspire us with wisdom, all of us of every color, race and creed,
to use our wealth, our strength to help our brother,
instead of destroying him.

Help us to do YOUR will as it is done in heaven
and to be worthy of YOUR promise of peace on earth.

Fill us with new faith, new strength and new courage,
that we may win the Battle for Peace.

Be swift to save us, dear God,
before the darkness falls ★ ★ ★



*From the "Battle for Peace," an address by Conrad Hilton.

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Can your school afford not to have

BRADLEY WASHFOUNTAINS?

SAVE MONEY. Semi-circular Washfountains like these serve as many as five students with *one* set of piping connections. This single feature cuts your installation costs 50% or more! **SAVE SPACE.** They reduce your space requirement 33%.

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Bradley Washfountains and Showers provide group facilities for as many as 8 and 5 persons, respectively... in schools of all types and sizes. For additional information, contact your architect, consulting engineer, or plumbing contractor. Or write for illustrated Publication No. 1418, Bradley Washfountain Co., 2207 W. Michigan Street, Milwaukee 1, Wis.

Coming Events

DECEMBER

26-30. National Science Teachers Association and American Association for the Advancement of Science, joint meeting, Denver.

27-29. Modern Language Association of America, Cincinnati.

27-29. National Business Teachers Association, St. Louis.

FEBRUARY

14-17. American Association of Colleges for Teacher Education, Chicago.

17-21. American Association of School Administrators, Atlantic City.

24-28. National Association of Secondary School Principals, St. Louis.

MARCH

4-7. Association for Higher Education, Chicago.

4-8. Association for Supervision and Curriculum Development, N.E.A., Las Vegas, Nev.

9-14. National Science Teachers Association, San Francisco.

24-28. Department of Elementary School Principals, N.E.A., Detroit.

25-30. Department of Audio-Visual Instruction, N.E.A., Kansas City, Mo.

APRIL

6-10. American Association for Health, Physical Education, and Recreation, Cincinnati.

8-14. National Library Week.

11-15. National Association of Women Deans and Counselors, Chicago.

12-14. National School Boards Association, St. Louis.

15-18. National Council of Teachers of Mathematics, San Francisco.

22-27. Association for Childhood Education International, Indianapolis.

24-27. National Catholic Educational Association, Detroit.

24-28. Council for Exceptional Children, Columbus, Ohio.

MAY

20-23. National Congress of Parents and Teachers, Portland, Ore.

Who Said? The notion that one-teacher schools in the country (there are more than 23,000 of them) are staffed by a young, unmarried school-marm proved false when the N.E.A. surveyed the situation. The average teacher in a one-teacher school is female, 45 years old, married and has two children.

Edited by BESSIE COVERT

LOOK inside back cover for Postage Paid inquiry card for more information.

Low-Cost Language Lab Moves

Ready to be used when it is plugged into an ordinary electric outlet, the RCA Mobile Language Laboratory accommodates ten pupils and sells just under one thousand dollars. It can be wheeled into classroom, simplifying the teaching of languages and making possible the use of a Listen-Respond laboratory system in small schools or for small or special groups in larger institutions without the need for permanent installations. It was designed primarily for elementary and junior high school use, but can also be used effectively in senior high or in special schools.

The neat, compact unit, completely self-contained, moves easily on smooth-rolling ball-type casters, can be transported by teacher, pupil or custodian, and can be used in any classroom having an electric outlet, thus making maximum use of available space. The console contains



a flush-mounted tape deck which is suitable for use in recording or as a program source; ten jack plugs for connecting the student positions; a control panel which gives the teacher complete control of the system; an amplifier for program distribution and intercommunication, and a power supply for the student amplifiers. The interior of the console provides storage space for student and instructor's headphones and lesson tapes. The console is attractive in design and constructed of vinyl clad steel with aluminum legs.

Controls are kept to a minimum to assure simplicity of operation. They include a ten-position student selector switch, a monitor-talk-listen switch, a program volume control switch, a jack for safety key which controls accidental erasure in recording, a headset jack and a student record jack. Equipment for each student consists of a headphone, miniature, transistorized amplifier located in the right earpiece, and microphone, all contained in a single lightweight unit.

The mobile unit can also be used for speech therapy, remedial reading, stenography or in other applications where tape



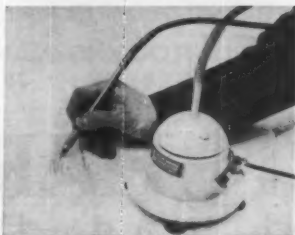
recorded lessons are used. It can be used efficiently in a classroom where other lessons are conducted, making it particularly adapted to language and other specialized teaching in small schools. Radio Corporation of America, Meadow Lands, Pa.

For more details circle #1 on mailing card.

For the Modern Library

The Bro-Dart "Contemporary Series" library equipment is designed to achieve a bright, open appearance with sturdy construction. Including cabinetry, shelving, tables, desks and other units, the accent is on flexibility with efficiency and economy.

The furniture includes individually sized reading desks; long-lined, apronless tables with tapered and fluted legs for attractive appearance, but structurally designed for maximum support; shelving units in either free-standing or wall-attached styles, single or double-faced, the shelves adjustable to a fraction of an inch through a unique, positive-locking device; and book and audio trucks. All cabinetry is made of anodized aluminum extrusions



WHAT'S NEW for Schools

and pre-finished wood panels, available in a variety of finishes.

The Bro-Dart Mobile Book Truck is now equipped with a motor and a simple button system which permits the librarian to direct the truck as it is moved forward and backward. Another truck houses a complete stereophonic system for use in teaching or for private listening.

The new Bro-Dart rolling Book-Bin is a handsomely styled cabinet, specifically engineered to promote utilization of every available inch of space. The spring-back shelf sinks gradually as books are placed on it, and rises as the weight decreases. Large quantities of books can be safely stored and when it is rolled to the storage



shelves, books are removed without the necessity for bending or stooping.

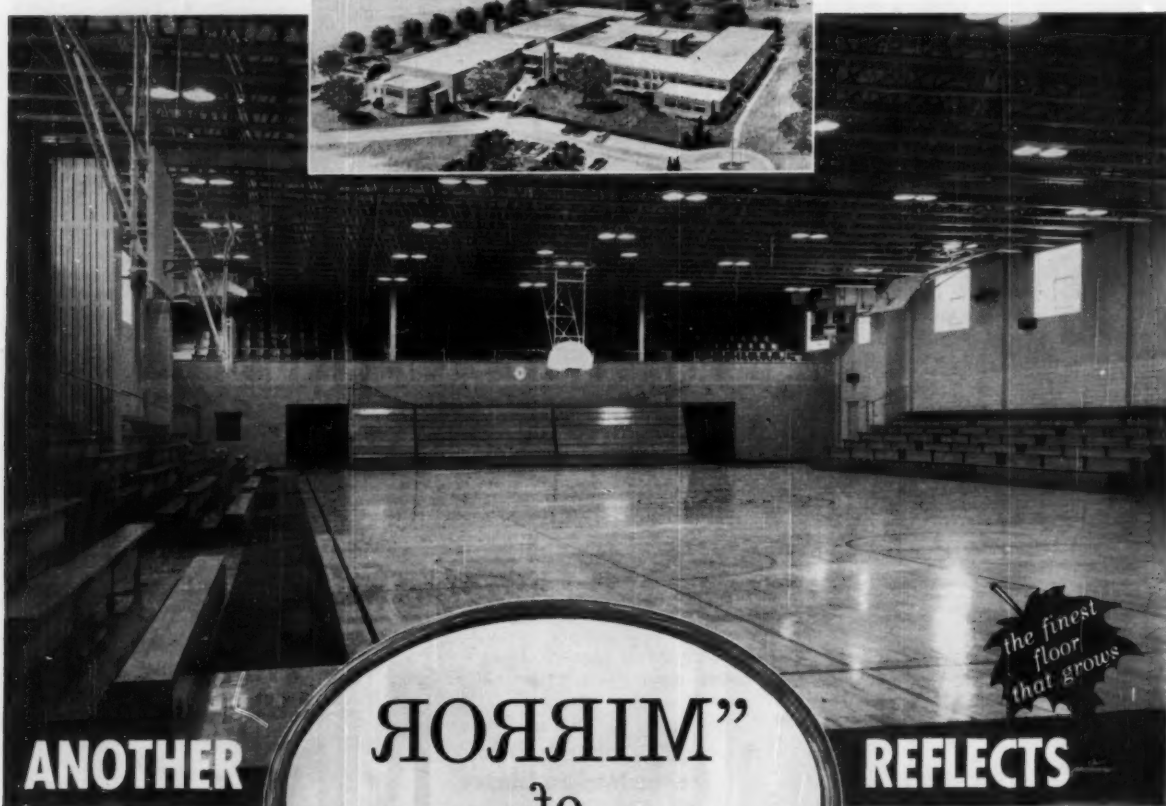
Two charge-out systems introduced by Bro-Dart automatically and/or electronically record all information needed both by the library and by the borrower, eliminating the necessity of writing details and reducing clerical errors. The compact Sysdac fits on any library desk and the only new item required for its operation is the embossed metal plate containing name and address of the borrower.

With the Brodac system, an immediately visible copy of the title and author of the book to be borrowed, borrower's name and address and the transaction number and date are quickly made.

A supply item developed particularly for library use and helpful in handling the constant need for changing information on catalog cards is available in the Bro-Dart electric eraser, which helps avoid erasing more than is intended. Bro-Dart Industries, Inc., 56 Earl St., Newark 8, N.J.

For more details circle #2 on mailing card.
(Continued on page 107)

Notre Dame High School, Trenton, N.J. Architect: Wm. W. Slack & Son, Trenton. Floor of MFMA Northern Hard Maple



ANOTHER

"MIRROR"
to
"MAPLE"

REFLECTS

*Wise Planning
Sound Building
True Thrift*

as explained by the architect:
"The Northern Hard Maple flooring in the gymnasium has been satisfactory in every way. It shows no signs of wear and we would not hesitate to give it highest recommendation. It is truly a beautiful floor and we have had only favorable comments on it."
—L. W. Slack

**consensus of coaches (90-to-1):*

**"MAKE YOUR PLAYING FLOOR MAPLE
OR YOU MAKE A MISTAKE!"**

Write for Coaches' Survey Summary, available to all Architectural and School People... and for MFMA Revised Specifications Manual.

See SWEET'S 13j-Ma.

- Beneath the genial glow of a Northern Hard Maple floor are time-proved virtues, enormously important to *coaches and players, to building committees, to taxpayers. No other floor, natural or synthetic, has ever matched this *finest floor that grows*. It is fast under foot, non-slippery, warm and dry.
- Its brightness emphasizes court lines, for sharper peripheral vision. It's ultra-smooth, for least-possible abrasion in case of tumbles. It's "live," not "dead"—has the true resilience for better bounce, greater resistance to scuffs, scars or dents that gouge or splinter lesser floors.
- With easy, routine maintenance, a floor of MFMA Northern Hard Maple will outlast the building ("always a new floor underneath"). In standard strip for nailing and in block and patterned designs for laying in mastic. Write —

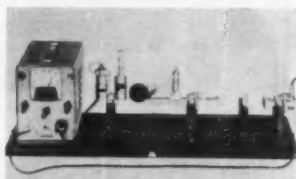
MAPLE FLOORING MANUFACTURERS ASSOCIATION

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NORTHERN HARD MAPLE
BEECH and BIRCH

Portable Demonstration Set for Optics and Microwave

The teaching of optics and microwave fundamentals is facilitated with the Ed-Set, a low-cost portable demonstrator weighing only 33 pounds with carrying case, which can be plugged into any



standard AC outlet. The completely assembled instrument, for use in high school and college science departments for illustrating optics and microwave theory, can be used by student or instructor to measure electromagnetic radiation or confirm the natural laws of light in simple experiments showing the effects of reflection, refraction, interference, diffraction, standing waves and polarization. Radar signals can also be sent and various interference patterns measured, plotted and calculated. The Ed-Set contains all components in one package, all mounted on a sturdy wood platform. **Budd-Stanley Co., Inc., Syosset, N.Y.**

For more details circle #3 on mailing card.

Cenco Science Lab Kit for 150 Basic Experiments



Completely portable and correlated with recognized science text books, the new Science Lab Kit contains over 80 items for performing basic experiments at the elementary and junior high school level. An illustrated manual provides step-by-step description of over 150 fundamental experiments, and equipment for performance of these experiments is contained in the kit. **Cenco Instruments Corp., 4711 W. North Ave., Chicago 39.**

"Sight-Sound Language Station" Provides Synchronized Picture



The "Sight and Sound Language Station" provides a descriptive picture syn-

chronized with a lesson, to accelerate and simplify language courses with savings of time and money. The low-cost, portable unit is contained in one compact, lightweight, luggage case and requires no fixed use of classroom space. It combines a 35mm filmstrip rear projection of screen images with a four speed hi-fi record player and four sets of earphones. **Viewlex, Inc., Holbrook, L.I., N.Y.**

For more details circle #3 on mailing card.

Nissen Medart Apparatus Has Lifetime Finish

Bold new design, new functional beauty, new lifetime chrome finish and lighter weight are built into the Nissen Medart line of gymnasium apparatus. The special oval-shaped tubing construction provides the lighter weight, yet excellent stability is afforded by the wide bases. Exceeding Olympic specifications, the line features a



full range of adjustments, up or down, for use in competition or by beginning classes. New spring-loaded ball bearing adjustments permit one person to change heights and widths easily and quickly. Apparatus is moved easily by one handy,

rubber-tired transporter without marring floors. **Nissen Medart Corp., 930 27th Ave. S.W., Cedar Rapids, Iowa.**

For more details circle #6 on mailing card.

Three Insti-Pack Soups in Campbell Institutional Line



A new line of Insti-Pack (short for institutional package) Soups, developed especially for the quantity food service field, is now offered by Campbell Soup. Different in appearance and taste from products currently available to the consumer, the three new soups are the first in what will be an expanded line. Included are a special formulation Vegetable Soup, Chicken Noodle Soup and Clam Chowder. The latter lends itself especially to variation by the addition of milk for New England style or of tomato products for Manhattan-type. Insti-Pack soups are distinguished primarily by the cut of the meat, vegetables and other ingredients to make them look home-made, and retain the high Campbell quality in every respect. They are packed in 50-ounce cans. **Campbell Soup Co., Camden 1, N.J.**

For more details circle #7 on mailing card.

(Continued on page 108)

SPEEDY EFFECTIVE CLEANING

**WHITE
TYMSAVER
OUTFIT...
A FAMOUS
COMBINATION OF
THE "CAN'T SPLASH"
WRINGER AND
OVAL BUCKET
ENGINEERED TO
DO A BETTER JOB
QUICKER**



in floor
cleaning
equipment...



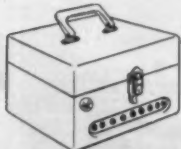
WHITE
IS THE WORD FOR
CLEAN

WHITE MOP WRINGER COMPANY, FULTONVILLE 20, N. Y.



MULTIPLYING INDIVIDUAL PARTICIPATION

This rugged—low cost—eight station listening system comes complete with eight light weight U.S. made double headsets. Input jacks are built right into the HB-2 carrying-storage case. These inputs accommodate the eight headsets and provide an extra jack for additional units. Headsets are durable, self-adjusting models with Alnico magnets and vinyl covered headbands equipped with standard plugs that fit all ATC record players, radios and most tape recorders. 10 foot input cable also has standard phono jack. The carrying and storage case is $\frac{3}{8}$ plywood, fully covered in a tough silver brown fabricoid. Removable lid has solid plastic carrying handle and sturdy latch.



\$49.50

ATC HB-2
\$49.50 school net.
\$74.25 list.

SEE YOUR DEALER OR WRITE FOR COMPLETE SPECIFICATIONS

AUDIOTRONICS

11057 WEDDINGTON STREET, NORTH HOLLYWOOD, CALIFORNIA

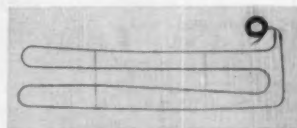
Liquid Dishwashing Concentrate for Automatic Machines

Mir-A-Kol is described as an entirely different kind of liquid machine concentrate based on a new concept of dishwashing chemistry. Emphasizing neatness and use control as well as general dishwashing efficiency, it gives a fine degree of sparkling cleanliness, drainability and rinsing. DuBois Chemicals, Inc., Broadway at Seventh, Cincinnati 2, Ohio.

For more details circle #8 on mailing card.

Snow-Bar Thawing Cable Frees Surfaces of Ice

Chromalox Thermwire Snow-Bar heating cable automatically keeps surfaces free of snow or ice build-up. Low in op-



erating costs, the Snow Bar can be embedded in asphalt, macadam or concrete, or placed on present hard or gravel areas and covered with a layer of surfacing material. Edwin L. Wiegand Co., 7500 Thomas Blvd., Pittsburgh 8, Pa.

For more details circle #9 on mailing card.

Sliding Acoustic Wall for Varied Classroom Space

Classroom space can be adapted instantly to the needs of any class or group, with the same sound privacy as most fixed walls commonly used in schools, with the new Hauserman Operable Wall. The sliding acoustical barrier is made up of individually hung panels which slide in or out of place on a patented hanger assembly. As a room divider it delivers 39 decibel sound reduction and permits additional use of special purpose and multiple purpose rooms since the easily-moved acoustical



barrier permits instantaneous adaption of space to meet changing needs.

A double wall effect is achieved through steel panel construction, rockwool-packed and a system of continuous gasketing at the perimeter and at panel joints seals out sound leaks. In place, Operable Wall has a flush, permanent appearance and work surfaces of chalkboard and tackboard may be permanently applied, with communicating door panels providing easy access between divided areas. The wall is designed for simplicity of operation by one person and for minimum maintenance. The E. F. Hauserman Co., Dept. 23-M-2, 5711 Grant Ave., Cleveland 5, Ohio.

For more details circle #10 on mailing card.
(Continued on page 110)



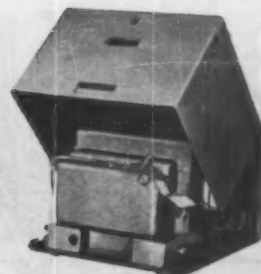
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EXECUTIVE
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PRESIDENT



THIS NCR SYSTEM pays for itself in less than two years.



The number of each job is recorded automatically into punched paper tape. The tape is then processed electronically for job analysis, craft analysis, and reports of costs against estimates.

"Our NCR System with Punched Paper Tape
saves us \$9,400 a year...
returns 88% annually on investment!"

—Kitchell-Phillips Contractors, Inc., Phoenix, Arizona

"We are convinced the NCR System with Punched Paper Tape is the most efficient System for our business. Because we are in a highly competitive field, accurate, up-to-date cost information is imperative. Our NCR System is more accurate than our previous method, and important information is always available when needed.

"Data captured in punched paper tape during the normal accounting functions is processed to furnish the analysis reports which we consider so important. In addition, the flexible NCR System provides us with job costs, monthly

reports of cost against estimate, health and welfare reports, craft analysis, and all of our general accounting.

"We are happy to report that with our NCR System we save \$9,400 a year, an annual return of 88% on our investment! We are so pleased that we would be glad to be of assistance in introducing this System to others in our area."

Samuel F. Kittchell

Executive Vice President

James B. Phillips

President

Your business, too, can benefit from the many time- and money-saving features of an NCR System. NCR Systems pay for themselves quickly through savings, then continue to return you an extra regular yearly profit. The NCR world-wide service organization will help protect this profit. Ask us about the National Maintenance Plan. (See the yellow pages of your phone book.)

NCR *National*

ACCOUNTING MACHINES
ADDING MACHINES • CASH REGISTERS
ELECTRONIC DATA PROCESSING
NCR PAPER (NO CARBON REQUIRED)

THE NATIONAL CASH REGISTER COMPANY Dayton 9, Ohio
1039 OFFICES IN 121 COUNTRIES • 77 YEARS OF HELPING BUSINESS SAVE MONEY

Electric-Powered Work Cart Carries Personnel and Supplies

Time and effort can be saved, with reduced personnel, when the new version of the Workmaster is used. Supplies, maintenance equipment and the like are quickly and easily transported to the place of need with the versatile unit, which is available either gas or battery-powered. The latter is a new and modified version of the Toro Caddy Master, this one designed for use in institutions to speed up



maintenance, carry security guards or personnel on inspection trips, and transport equipment and supplies between buildings or between departments, as well as other uses.

The electric-powered car has the same ease of handling, ruggedness and dependability as the earlier quiet-operating gas model, but it runs silently. Both models have finger-tip forward and reverse levers, they stop when the accelerator pressure is released, to ensure safety, and the foam rubber seat, pivoting padded back rest and shock absorbers assure a comfortable ride under any circumstances.

The cars are fitted with standard or large Terra tires with sideboards on the carry-box. **Toro Mfg. Co., 3042 Snelling Ave., Minneapolis 6, Minn.**

For more details circle #11 on mailing card.

Packaged Training Courses for Overhead Projection

The Masters Program, introduced by Ozalid, is designed to place professional educational research and instructional art



for a complete course at the teacher's disposal at reasonable prices. The packaged training courses of visual aids for overhead projection are planned to enhance the efficiency and extend effectiveness of teaching. Material permits teachers to produce their own transparencies for science and math courses at minimum cost, and without photographic darkroom methods or preparation of artwork. Ozalid Masters Kits now available include those for General Science, Physics, Algebra, Chemistry, Beginning Electronics and Biology. **Ozalid Div., General Aniline & Film Corp., Johnson City, N.Y.**

For more details circle #12 on mailing card.

Multi-Purpose Wardrobe Has Adjustable-Height Coat Rod

Accommodating a minimum of 12 children, the compact Multi-Purpose Elementary Wardrobe features an adjustable-height coat rod with 12 hooks to serve children in any age group. A bottom shelf stores boots and rubbers, and a half-shelf may be used for hats, books or lunches. **Lyon Metal Products Inc., 6 Plant Ave., Aurora, Ill.**

For more details circle #13 on mailing card.



G-E Cooking Center Features Microwave Units

Containing two complete and independently operated units, the General Electric Microwave Cooking Center reduces preparation time considerably. An accurate timer eliminates guesswork and a quality heat level is constantly maintained. Manufactured to close tolerances to lessen crevices which might accumulate unsanitary matter, the compact stainless steel unit is easily cleaned. **General Electric Co., Schenectady 5, N.Y.**

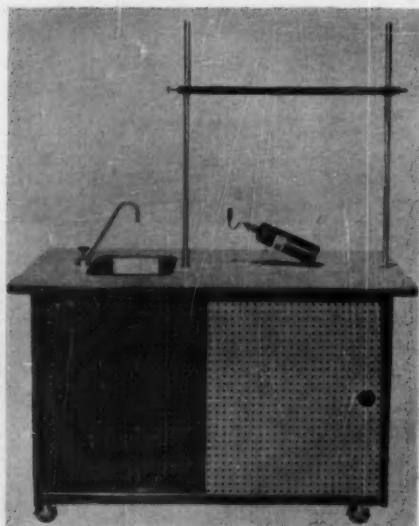
For more details circle #14 on mailing card.
(Continued on page 112)

ROYAL SCHOOL LABORATORIES CREATE THIS NEW PORTABLE SCIENCE DESK

WITH LASTING WORK TOP OF

NEVAMAR®

HIGH-PRESSURE LAMINATES



With this desk, any classroom becomes a small laboratory. It is constructed with a super-hard NEVAMAR top that resists stains and scars, stays spotlessly clean with minimum care. NEVAMAR has given time-tested performance on school furniture, cutting costs of replacement and maintenance. This desk is an outstanding example of the many distinctive applications for which NEVAMAR has been chosen.

Photo: Portable science desk, 54" x 28" x 35 1/4" high. Has stainless steel sink, pump faucet, bunsen burner, fuel tank, electrical receptacle with cord, apparatus trays, polyethylene bottles. Made by Royal School Laboratories, Richmond, Virginia.

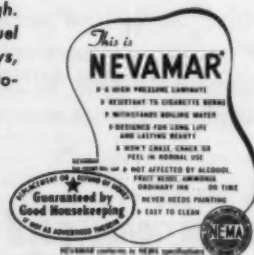
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NATIONAL PLASTIC PRODUCTS COMPANY, INC.

Saran, Nylon and Polyolefin Fibers—Nevamar High-Pressure Laminates—Wynene Extruded and Molded Products

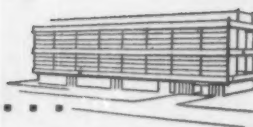
ODENTON, MD. • NEW YORK, N.Y. • MIAMI, FLA. • CHICAGO, ILL. • DALLAS-FORT WORTH, TEX.
DENVER, COLO. • PORTLAND, ORE. • LONG BEACH, CALIF. • SAN FRANCISCO, CALIF.
CLEVELAND, O. • CHARLOTTE, N.C. • MEMPHIS, TENN. • INDIANAPOLIS, IND.



for any door . . .



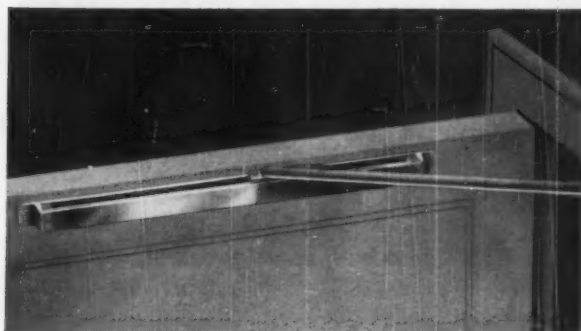
for any school building . . .



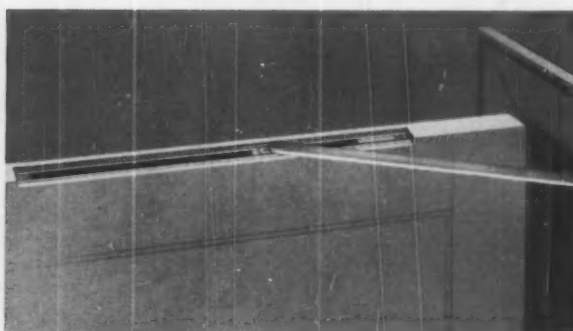
for any budget . . .



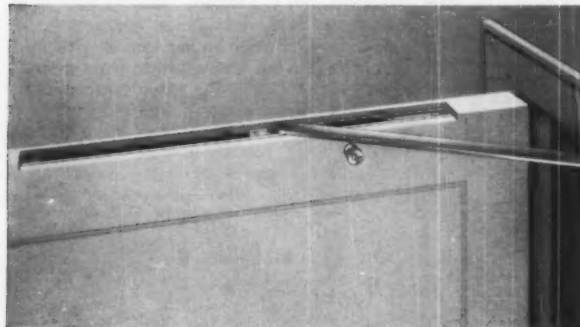
russwin door holders



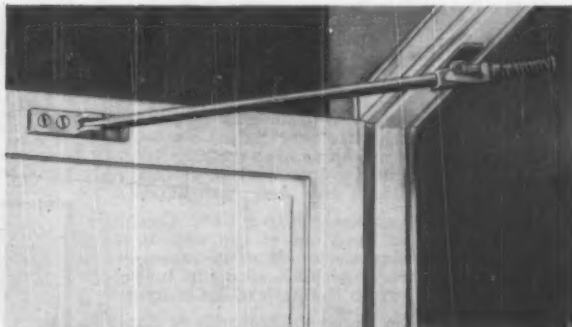
RUSSWIN 1750 DOOR HOLDER — The ultimate in door holders! Exclusive latch design is virtually wear-free. Extra heavy construction: extruded brass; forged brass end-brackets. Meets Fed. Spec. 1161.



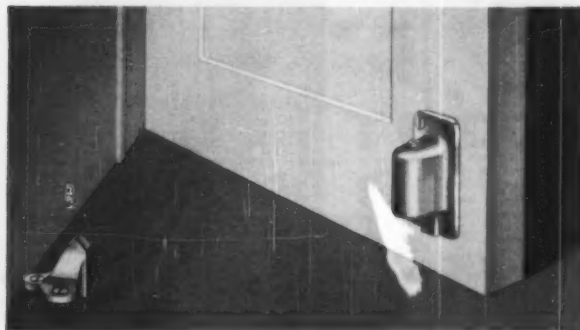
RUSSWIN 600 SERIES DOOR HOLDER — For interior doors. Available with exclusive "triple-grip" device for any-position holding . . . or with fixed position hold-open. Extruded brass. (1650 Series for surface application.)



RUSSWIN 700 SERIES DOOR HOLDER — Similar to 600 Series, but free-acting and equipped with knob control for hold and non-hold functions. Adjustable tension. Automatic engagement, release.

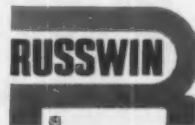


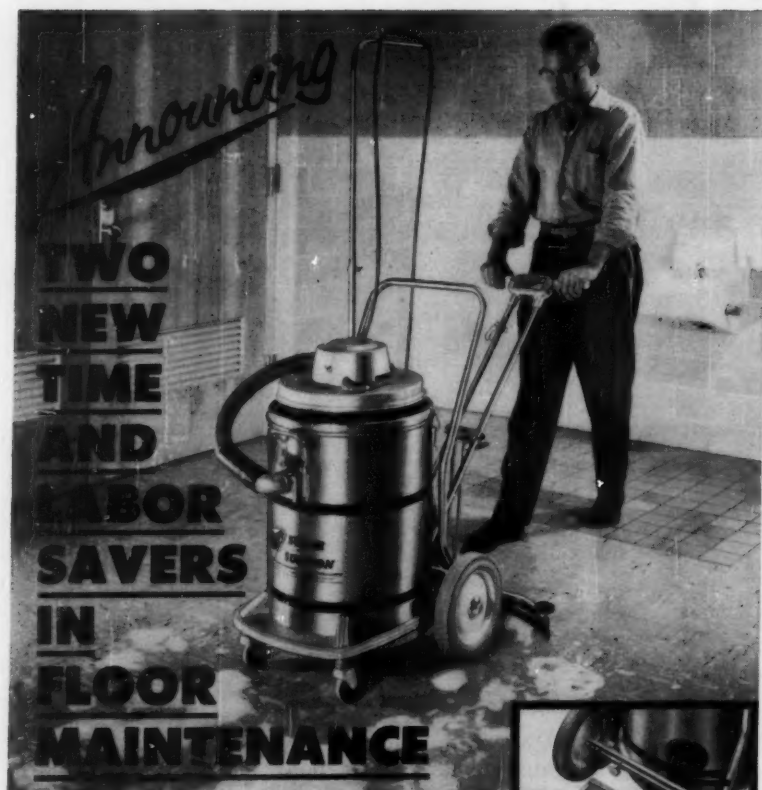
RUSSWIN "ROLL-R-HOLD" 520 SERIES DOOR HOLDER — Reversible surface type. Dual holding latch holds doors open to 110° (max.). Adjustable holding force. Steel construction with cast gun metal bronze slide and brackets.



RUSSWIN 200 SERIES DOOR HOLDER — Floor or wall strikes. Automatic action. Adjustable holding force. Heavy duty brass, bronze or aluminum.

Doors in school buildings take a beating. So does the hardware. But Russwin Door Holders are built to take it. They are *service-proven*, in thousands of schools and colleges. This precision-made finely finished doorware includes all types . . . holders for any door, any school, any budget! For literature, call your Russwin supplier. Or write Russell & Erwin Division, The American Hardware Corporation, New Britain, Conn.





Announcing
TWO
NEW
TIME
AND
LABOR
SAVERS
IN
FLOOR
MAINTENANCE

SAVE all that labor and time you would spend attaching and removing a squeegee attachment to a heavy duty suction cleaner.

SAVE all the effort and time you would spend keeping the suction cleaner cord out of the work area. Super now provides 2 long-desired, new, exclusive features.

① For massive scrub water pick-up you can attach or detach the big Super Squee-Zee 30 floor drying attachment to a Super Model BP-2 or RS-1 heavy duty suction cleaner in ten seconds without any tools—just hands.

② The new, exclusive Super Cord Control Mast keeps the cord out of the way at all times, permitting the operator to maneuver the cleaner freely without stopping to pull the cord away from the path of the machine.

Guide wheels mounted on the ends of Super Squee-Zee 30 blade unit permit free use of the Squee-Zee 30 close to walls and other surfaces without damage or slow-down in operation.

The new Super Squee-Zee 30 provides an extra large suction chamber that will handle wet pick-up as fast as the operator can walk, leaving a 30" swath of perfectly dry floor—no streaks, no wet spots, no wheel marks.

Makes your regular Super suction cleaner a big volume floor drying machine at small cost. Dries up to 26,000 sq. ft. per hour.

You won't find these new features on any other heavy duty suction cleaner.

WRITE FOR CATALOG AND DATA, OR
LET YOUR LOCAL SUPER DISTRIBUTOR SHOW YOU!



SUPER® / **SUPER®**
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POWER SUCTION CLEANERS FLOOR MAINTENANCE MACHINES

SINCE 1911 • THE DRAFT HORSE OF POWER CLEANING MACHINES

THE NATIONAL SUPER SERVICE COMPANY

1956 N. 13th St. • Toledo 2, Ohio

Brunswick Tab-lette Chair Permits Functional Groupings

Particularly effective for lecture groupings, the Brunswick Tab-lette Chair is designed to be functional without consuming

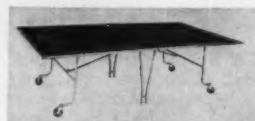


valuable floor area. The unique, drop-down surface mechanism, made from Brunswick's no-glare Ophtholite, immediately responds to very light pressure such as when a student rises. The indestructible fiberglass chair is available in six colors. Brunswick Corp., 2605 E. Kilgore Rd., Kalamazoo, Mich.

For more details circle #15 on mailing card.

Fold-O-Leg Design for Mitchell Tennis Table

A unique counterbalanced assembly makes it easy to fold and unfold the new professional-type tennis table added to the Mitchell Fold-O-Leg line. The table automatically locks when folded, yet the lock is easily released. The top section is sup-



ported by full-length cold rolled steel channels with Twin-Type center legs of high carbon steel tubing tipped with four rubber cushion glides for positive support on uneven floors. The green non-reflective mat finish on the hardboard faced playing surface with selected plywood core has U.S.T.T.A. specified markings. The tables store in minimum space. Mitchell Mfg. Co., 2730 S. 39th, Milwaukee 15, Wis. For more details circle #16 on mailing card.

Rigid Plastic Liners Are Easy to Clean

Sanitary, easily cleaned polyethylene is used to form the new rigid plastic liners designed to fit a range of sizes of top-emptying waste receptacles. The contain-



ers are extremely lightweight and easy to handle, have no dirt-catching corners or seams, and are built for long service in handling either wet or dry waste. They are available in five sizes in granite gray or white, and can be used alone as waste baskets. Rubbermaid, Inc., Wooster, Ohio. For more details circle #17 on mailing card.

(Continued on page 114)

TOLEDO Dishwashers

...The Mark of
Modern Kitchens

- **SAVE TIME**
- **CUT OVERHEAD**
- **PROTECT SANITATION**

Automate your dishwashing operations with a new Toledo . . . and save time, cut costs, bring sparkling new cleanliness to dishes and glassware. The broad range of Toledo Dishwashers answers every requirement of the modern institutional or restaurant kitchen. There's no need to compromise . . . Toledo gives you unchallenged quality and performance in just the right size and type dishwasher to fit your needs. To learn more about Toledo Dishwashers, and all the advantages they have for you, call your Toledo Kitchen Machines Dealer. Or, write to us for literature.



Panoramic Door is a Toledo exclusive offered in a broad range of models. Gives easy access to full length of conveyor for easiest cleaning. Capacity 4,805 to 12,600 dishes hourly. Zip-Lok Tubes and one-level tank construction, plus many other advanced design features.



Toledo Rackless Hi-Speed Conveyor Dishwashers feature exclusive Add-A-Tank Design. Selected Add-A-Tank units go together to give you just the length, capacity and extra features you need . . . allow for future expansion. Capacities from 4,000 to 15,000 dishes hourly. Automatic water level and final rinse controls.



TOLEDO® Kitchen Machines

Division of TOLEDO SCALE CORPORATION • 245 Hollenbeck Street, Rochester, N.Y.

SEND TODAY for complete information on new, advanced design Toledo Dishwashers to upgrade efficiency and pare costs in your kitchen operations.



Hi-Speed Mixers feature positive drive, clean, efficient operation. Model TM-20 (20 qt.) shown. Also 30 qt. and 60 qt. sizes.



Peelers offer fast, double-action peeling, with abrasive on both disc and cylinder. Low waste. Portable and Cabinet models.



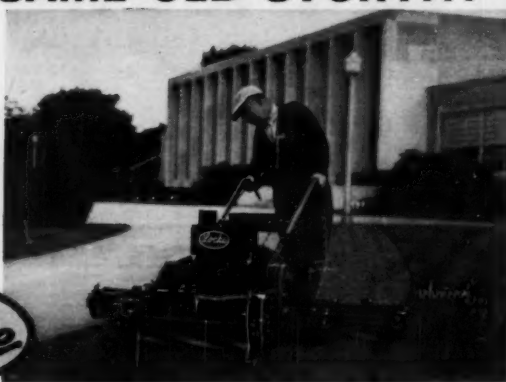
Dishwashers fast, thorough, dependable. Available in Door, Counter, Conveyor and Rackless types. Advanced design, easy cleaning.



Hi-Speed Choppers powerful, heavy-duty designed. Outstanding in performance and appearance. Full range of models from 1/2 H.P. to 5 H.P.

IT'S THE SAME OLD STORY...

the best
looking
lawns
are cut
by a



No wonder! Lockes trim and mow in one operation, always cutting ahead of the tractor rolls . . . a unique feature leaving no uncut, matted down grass, since the entire mower travels on cut grass. The 1/3 overhang of the cutting units eliminate half of your secondary trimming operation; saves time, energy and money. Locke Triplexes with their designed-in synchronized roller chain drive, guarantees smooth operation; a safe, sure cut on wet or dry grass, year-in-year-out. Be proud of your lawn! Cut and trim it, economically, beautifully with a Locke. Your Locke Service Dealer is ready to show you its many exclusive features . . . demonstrate its lifetime values. See him today!

2 Models—Single or Triplex; 4 Basic Sizes—25", 30", 70", 75"; Plain or reverse.



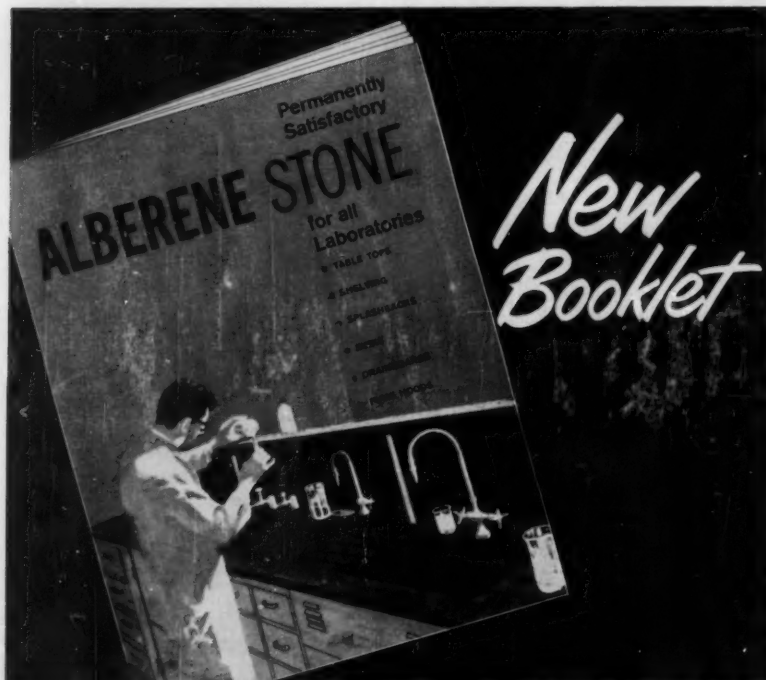
POWER LAWN MOWERS

A product of The Locke Steel Chain Co.

Send for literature.

1351 Connecticut Ave., Bridgeport 1, Conn.

Invest in a Locke!



ALBERENE STONE—for 75 years the only permanently satisfactory material for chemical laboratory table tops, shelving, sinks, splash backs, drain boards and fume hoods. Prompt delivery. For FREE literature and technical assistance address: ALBERENE STONE (A DIVISION OF THE GEORGIA MARBLE COMPANY) 386 PARK AVENUE SOUTH, NEW YORK 16, N. Y., DEPT. S

Duplex-a-lite Fixture

Provides Viewing Comfort

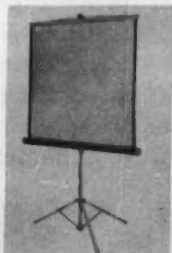
The Duplex-a-lite fluorescent lighting fixture features twin lamp chambers and optically designed prismatic lenses that direct and distribute most of the light downward to the work plane and away from the critical viewing zone, thus providing a maximum of useful light and optimum seeing comfort. Each lamp is enclosed by plastic lenses which are widely separated for cool operation. The ceiling-mounted fixture is moderately-priced and easily maintained. The Miller Co., Meriden, Conn.

For more details circle #18 on mailing card.

Heavy Duty Wonder-Lite Screen Has Rugged Tripod Stand

Portable and sturdy, the Heavy Duty Wonder-Lite screen has a rugged tripod stand with sturdy legs for quick set up and tensioning of the screen fabric. The silver lenticular surface is seamless, assuring undistorted optically correct viewing. The screen is available in large sizes, including 60 by 60 and 70 by 70 inches. Fidelity of color reproduction and sharpness of image for black and white, color, stereo slides and motion pictures are achieved, even with widest viewing angles, with the new screens. Da-Lite Screen Co., Inc., Warsaw, Ind.

For more details circle #19 on mailing card.



Jamolite Swinging Doors

Provide Convenience, Speed

Hinged to swing in both directions to provide maximum convenience and speed in entering or leaving cold storage or controlled temperature rooms, the new Jamolite doors feature light weight for easy operation. Durable gaskets eliminate air leaks and passage of odors, gases or vapors. Foamed-in-place plastic gives the doors strength and rigidity, forming an integral unit that is doubly insulated. They are available in single or two-leaf units, in five attractive colors that are a permanent part of the plastic surface, and do not require painting. Jamison Cold Storage Door Co., Hagerstown, Md.

For more details circle #20 on mailing card.

Cooked Boned Fowl Roll

Is Convenient, Economical

Containing no skin, bones or giblets, the Armour Cooked Boned Fowl Roll is pre-cooked in the casing in natural juices to retain the rich flavor. Economical and convenient, it saves time, labor and storage space and permits exact portion control in preparing all quantity chicken recipes. Armour & Co., P.O. Box 9222, Chicago 90.

For more details circle #21 on mailing card.

(Continued on page 118)



NO CONFLICT

© 1961 ROYAL McBEE

DETERMINE YOUR MASTER SCHEDULE QUICKER AND WITHOUT CONFLICT...WITH A LOW-COST ROYAL McBEE SYSTEM TAILORED TO YOUR NEEDS.

Master Schedules are no problem with low-cost Royal McBEE systems.

Total numbers are broken down in no time at all. By required courses. By remedial courses. By electives. By scholastic rating. By aptitude—or any other pertinent category.

A Master Schedule of all courses is then prepared in a coordinated operation. What once took days or weeks can now be accomplished in hours.

You know in advance what courses a student can take . . . and what alterna-

tives are available in case of conflict.

Adaptable to the needs of any size school. We don't sell you a system. We develop the system you need.

For over 50 years, our representatives have been solving scheduling, programming and grading problems with flexible Royal McBEE systems. Your nearby

Royal McBEE man will be glad to discuss a low-cost system tailored to your particular school. Call him. Or write to: Royal McBEE Corporation, 850 Third Avenue, New York 22, N. Y.

ROYAL

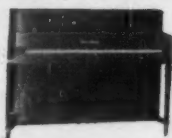
SPECIALISTS IN BUSINESS MACHINES

ROYAL McBEE CORPORATION

THERE'S NEVER ANY QUESTION
WHEN YOUR PIANO IS A



Mason & Hamlin



A piano of professional performance that fills every educational need . . . classroom . . . assembly hall . . . studio . . . or stage. Please write for free illustrated brochure.

MASON & HAMLIN CO.
East Rochester, New York

A The Signature of Quality Pianos

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Combination
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*School and Gym Floors
Our Specialty*

**CONNOR'S "LAYTITE"
EDGE GRAIN**

UP TO 50% LESS EXPANSION
IN THE USE OF EDGE GRAIN

(According to Forest Products Laboratory)

USE "LAYTITE" EDGE GRAIN FOR:

- ★ LESS EXPANSION AND CONTRACTION
- ★ MORE YEARS OF HARD WEAR
- ★ LIGHTER AND MORE UNIFORM COLOR
- ★ LESS DIFFICULTY IN HUMID AREAS
- ★ AVOID BUCKLING AND WARPING

AVAILABLE IN REZILL-CUSH* SYSTEM —
"CONTINUOUS STRIP" — REGULAR STRIP

See SWEET'S FILE Specs. #13J/CO.

CONNOR LUMBER AND LAND CO.

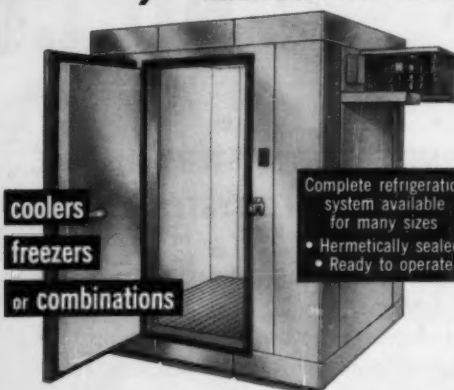
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*TRADEMARK

Bally walk-ins
Aluminum or steel sectional construction



coolers

freezers

or combinations

Complete refrigeration
system available
for many sizes
• Hermetically sealed
• Ready to operate

**Ideal for School Cafeteria Storage of Government
Supplied Frozen Foods—Dairy Products**

Pays for itself quickly with locker rental savings. Saves labor and time. Sanitary, efficient, strong. Assembly is fast, easy and accurate. Easy to add sections to increase size as needed . . . equally easy to disassemble for relocation. Lower in original cost than "built-ins". Suitable for outdoor use.

Bally Case and Cooler, Inc., Bally, Pa.

Get details—write Dept. NS-12 for FREE book.

Old wax—
new shine—
still safer to walk on!



When wax contains Du Pont anti-slip LUDOX® floors are safer...and they rebuff mirror-bright!

Floor wax containing "Ludox" colloidal silica is safer to walk on, and *stays* that way. When you rebuff this wax to give it a gloss as good as new, the anti-slip qualities remain. Tiny silica particles of "Ludox" provide millions of "grippers" that stay on the job, greatly lessening the tendency to slip. Other wax properties sacrificed? Not at all. You get the same lasting beauty and easy maintenance of regular fine waxes.

"Ludox" is Du Pont's registered trademark for its col-

loidal silica . . . an ingredient used by formulators of quality wax. Floor wax containing "Ludox" is available everywhere. If you'll mail the coupon, we'll send more information and a list of suppliers.

E. I. du Pont de Nemours & Co. (Inc.)
Industrial & Biochemicals Dept., Rm. 2545NS
Wilmington 98, Delaware

Please send more information on floor waxes with "Ludox" and a list of suppliers.

Name

Firm

Address

City State



LUDOX®
colloidal silica

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY



Before you buy ANY folding chair...

let us send you the complete story of CHANNEL FRAME CONSTRUCTION... how it provides resilient strength and gives solid, level seating. Compare Lyon design—backs and seats curved to match body contour—round, smooth edges and pinch-proof hinges. Send for free catalog of Lyon products including lockers, shelving, cabinets, coat racks.

LYON METAL PRODUCTS, INC.
1226 Monroe Ave., Aurora, Ill.

Send me Folding Chair Story and Lyon Catalog.

NAME _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____



LIGHTING FIXTURES

BRONZE
•
ALUMINUM
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WROUGHT IRON
•
STAINLESS STEEL

ARCHITECTURAL LETTERS

BRONZE, ALUMINUM, NICKEL-SILVER

BRONZE or ALUMINUM

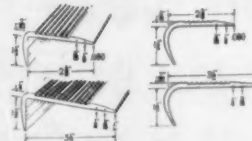
MEMORIALS • HONOR ROLLS
DONOR & PORTRAIT TABLETS

Illustrated Catalogs Sent on Request

MEIERJOHAN-WENGLER
1102 W. 9th St. CINCINNATI 3, OHIO

Rubber Safety Nosing Has Ribbed Surface

Ribbed-surface Rubber Safety Nosing for tiered floors or steps has form-fitting square or curved nose, and grooved cutting



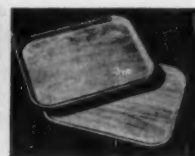
guides on the underside to eliminate the need for more thicknesses and facilitate accurate butting. It is available in No. 100 Heavy Duty in black, brown, tan or gray. The R. C. Musson Rubber Co., 1320 Archwood Ave., Akron 6, Ohio.

For more details circle #22 on mailing card.

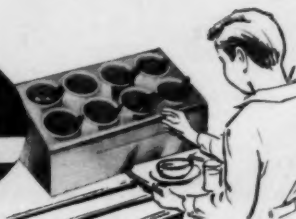
Rip-Coat Material for Piping Field Connections

A Mastic Collodial Resin that is highly resistant to moisture, weathering, acids, alkalis and electrolysis, Rip-Coat field closure material for sealing underground piping can withstand severe distortion and bending. It is unaffected by temperature ranging from sub-zero to 250 degrees F. Ric-wil, Inc., Barberton, Ohio.

For more details circle #23 on mailing card.



protect your students with



KEEP BACTERIA COUNT AT A MINIMUM

Sanitary silverware is essential in school cafeterias to safeguard students from bacteria contamination. With the Steril-Sil System, silver is never touched from rinsing to dispensing, assuring minimum bacteria count. Rugged lightweight nylon Cylinders, acid and heat-resistant, hold silver from sterilizer to serving station. Polished stainless steel Top Counter Dispensers, Unda-Bar Dispensers and Baskets are available to fit the needs of every size operation.

Silver is washed in upright position in Cylinders and tumbled into empty Cylinders handles up. Silver is then carried in convenient Baskets to replace empty Cylinders in Top Counter or Unda-Bar Dispensers.

The STERIL-SIL CO.

150 CAUSEWAY ST., BOSTON 14, MASS.



Kys-ite Serving Trays Feature Woodgrain Finish

Designed in Gray American Walnut and Blonde Cherry patterns, two new Kys-ite serving trays combine plastic and wood fibers for durability. Supplied in one size, the attractive trays are boilproof, warp-proof and do not lose their design clarity even with repeated washing. Keyes Fibre Co., Waterville, Maine.

For more details circle #24 on mailing card.

Sweden SoftServers Have Positive Foot Control

Easy to operate, the new positive-action foot control on the Sweden line of floor model SoftServers enables operators to



prepare quantities of ala modes and sundae in seconds, reducing labor cost and time. The SoftServers are available in a large variety of floor and counter models, with size and production capacity to meet individual requirements. Sweden Freezer, 3401 17th Ave. W., Seattle 99, Wash.

For more details circle #25 on mailing card.

(Continued on page 120)

What features of the Hamilton Language Teaching System impressed skilled instructors most?

... Hamilton's "Geographic" Console Switch Position—with student switches located in the same console position that the student occupies in class. No fumbling, no guessing, no numbers to check. One switch permits intercom, silent monitor, and student record. No annoying row selectors or talk-listen switches. Console cabinet desk is designed for comfortable instructor seating.

... Hamilton's Full Teacher Control—that allows student to discuss individual problems by pressing a booth button, activating light behind his console intercom switch.

... Fully Transistorized Amplifiers in both student and teacher consoles that assure hundreds of hours of maintenance-free service from Hamilton System. Dynamic microphones that are built to take vigorous school use.

More Than 40 Years of engineering and building quality educational equipment has given Hamilton the experience to deliver these and many more features that mean most to experienced language instructors.

A Hamilton Language System offers complete flexibility to fit your teaching situation.

.....MAIL COUPON NOW FOR DETAILS.....

Hamilton Manufacturing Company,
Two Rivers, Wisconsin

Name _____

Title _____

School _____

Address _____

City _____ Zone _____ State _____

Hamilton PROFESSIONAL AND SCIENTIFIC FURNITURE • Hamilton Manufacturing Company, Two Rivers, Wisconsin



Photo courtesy Cornell College

WAYNE WAYNE

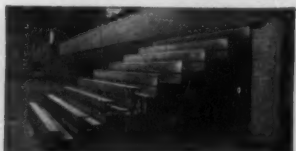


WAYNE INDOOR SEATING SYSTEMS

work wonders on
any school budget



Durable Wayne Model 30 folding bleacher.
Economy seating in the folding bleacher class.



Leader in luxury seating at a popular price.
Wayne Model 50 Rolling Gymstand.



Deluxe Model 70 continuous rolling gymstand.
Finest money can buy!



Only Wayne offers three basic types! More value, better engineering, finer performance in each... from the world's largest manufacturer of spectator seating. Write for big, all new 1961 catalog today.

WAYNE IRON WORKS • WAYNE, PA.

Literature and Services

• Produced as a service to professional educators, "Behind the Tape - the Teacher" is a 45-minute tape recorded guide to effective use of language laboratories. It is offered at the production cost of \$2.25 by Minnesota Mining & Mfg. Co., Dept. E1-333, 900 Bush Ave., St. Paul 6, Minn. The tape presents samples, in English, of structured pattern drills, as well as opinions of experienced teachers. A free 20-page lesson guide and other teaching patterns accompanies the tape.

For more details circle #26 on mailing card.

• The following new technical catalogs are now available from Dunham-Bush, Inc., 179 South St., West Hartford 10, Conn. Brunner Multi-Drive Application Manual #789; Brunner Multi-Drive Catalog #790; Dunham-Bush Coil Catalog #6001A, and Dunham-Bush Air Handling Unit Catalog #6011C.

For more details circle #27 on mailing card.

• Catalog 461 presents data on the complete line of ladders manufactured by Duo-Safety Ladder Corp., 513 W. 9th Ave., Oshkosh, Wis., to meet varied needs. The 38-page booklet contains an introductory section illustrating the care and skill used to produce the ladders, and illustrations show not only the types available, but construction features.

For more details circle #28 on mailing card.

• The full line of chalkboards, bulletin boards, specialty equipment, aluminum trim and accessories manufactured by Claridge Products & Equipment, Inc., Box 278, Harrison, Ark., is described and illustrated in Catalog 61. The 32-page booklet includes line drawings, photographs and specifications.

For more details circle #29 on mailing card.

• A 16-page Handbook of Pinkerton Services on the dollar-savings aspects of professional security controls is available to management from Pinkerton's National Detective Agency, Inc., 100 Church St., New York 7. The many applications for outcontracted security agency work are discussed, with 13 actual case histories cited, showing savings from \$5000 to \$54,000 per year.

For more details circle #30 on mailing card.

• A chart showing net weights of fresh produce in principal types of containers delivered to institutions is now available at 25 cents per copy from the United Fresh Fruit & Vegetable Assn., 777 14th St., N.W., Washington 5, D.C. The four-page bulletin covers 24 categories of fruits and 39 of vegetables, and was prepared by R. A. Seelig, Director of Information at the association, to assist institutional food buyers.

For more details circle #31 on mailing card.

• An 8-page catalog from Rocwood School Cabinet Systems, 300 Norton St., Rochester 21, N.Y., presents complete specifications on a versatile, modular line called "growing cabinets." Using a special leg and leveling device, each cabinet is installed quickly and can easily be adapted for various applications ranging from kindergarten through university.

For more details circle #32 on mailing card.

(Continued on page 122)

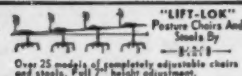
Famous Harco "LIFT-LOK" Chairs and Stools



MATCHING CHAIRS AND STOOLS FOR

ALL HARCO EQUIPMENT
The all NEW exclusive "Lift-Lok" adjustment automatically adjusts the seat for persons of all heights. From its lowest position to the desired height simply lift up seat and seat will automatically lock.

SIMPLE - INSTANT - POSITIVE



Write for Free Catalog and Price List
FULL 12 YEAR GUARANTEE ON
ALL HARCO CHAIRS AND STOOLS

GARRETT TUBULAR PRODUCTS, INC.

P.O. BOX 237 DEPT. NS GARRETT, INDIANA

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CURTAIN OPERATING EQUIPMENT

- ★ "Noiseless" Curtain Tracks
- ★ Electric Curtain Controls
- ★ Special Operating Devices

Vallen #175 Curtain Track

Can Be Recessed in Plaster!
For room partitioning, displays,
wide windows

Vallen Panorama

For T.V. Studios, School
Theaters

Curtain Operating Problems?

Write



world famous for the finest curtain
operating equipment since 1916

**Eliminate this Problem
in YOUR New School**



Install a
SPENCER
Vacuslot[®] System



Dirty mops mean a messy building. Yet mops can't be properly cleaned except by **vacuum**.

For faster cleaning and superior sanitation, specify Spencer Vacuslot . . . the **built-in vacuum** system that handles **all** these maintenance chores:

- Dry mop cleaning.
- Carry-off of dirt and litter.
- Conventional vacuum cleaning.
- Wet pick-up.
- Boiler tube cleaning (with significant savings on fuel).



**Request
Bulletin No. 153C**



The **SPENCER**
TURBINE COMPANY
HARTFORD 6, CONNECTICUT

• Done in story-telling form, the provocative motion picture, "One Chance," released by the American Gas Assn., 420 Lexington Ave., New York 17, covers the important subject of sanitation in institutional kitchens. The 25-minute, 16mm sound, color film stresses proper dishwashing methods, plus the checking and testing by health officials to determine whether the methods meet minimum sanitation requirements. Requests for Catalog No. 66/c will bring copies of the film, without charge, for showing to both management and personnel involved in volume feeding. Prints are also available through Economics Laboratory, Inc., 250 Park Ave., New York 17; Hobart Mfg. Co., Troy, Ohio; Ruud Mfg. Co., 2nd National Bank

Bldg., Connellsville, Pa., or your local gas company.

For more details circle #33 on mailing card.

• A revised edition of "The ABC's of Canned Foods," published by the National Canners Association, 1133 20th St., N. W., Washington 6, D.C., includes the most recent specific statistical information listed product by product.

For more details circle #34 on mailing card.

• Weldwood Permagard, a new surfacing created by the United States Plywood Corp., 55 W. 44th St., New York 36, is described in a four-page pamphlet which features comparative properties chart, recommended specifications and applications.

For more details circle #35 on mailing card.

• Every possible storage component for school music departments is provided in the specialized institutional storage components developed by Mutschler Brothers Co., Nappanee, Ind. The multiplex components are the result of over two years of field research by the company in cooperation with manufacturers of band and orchestra instruments, acoustics engineers and music educators. The storage facilities are designed to protect the costly instruments, uniforms, music and other equipment and supplies required by the music department. The 24-page catalog of Specialized Storage for the Music Department contains careful drawings of each component together with specifications and descriptive text, and the colorful cover illustrates actual installations in use.

For more details circle #36 on mailing card.

• Successful basketball coaches put their winning formulas into writing for the 1961-62 edition of Seal-O-San Basketball Coaches Digest published by Huntington Laboratories Inc., Huntington, Ind. The 64-page edition features a Defense Section and a Coaches Clinic, plus other interesting information.

For more details circle #37 on mailing card.

• Entitled "Educational TV . . . a primer," a 24-page booklet from Thompson Ramo Wooldridge Inc., Educational Electronics Div., 532 Sylvan Ave., Englewood Cliffs, N.J., describes and discusses, in non-technical terms, the simpler types of closed circuit systems, and how they may be used for educational purposes.

For more details circle #38 on mailing card.

• "Mechanized Food and Dish Handling for Schools, Colleges and Universities" is the title of a 12-page booklet issued by Samuel Olson Mfg. Co., Inc., Dept. NS-11, 2418 W. Bloomingdale Ave., Chicago 47. Descriptive information on the equipment is presented and line drawings and photographs of installations are used to illustrate many space-saving, efficient physical layouts in these institutions.

For more details circle #39 on mailing card.

Film Releases

"Fallout," a part of the "Nuclear Radiation" film series, discusses radiation as it occurs in nature and the man-made variety, then, through photography and animation, explains the three types of radiation fallout caused by the explosion of nuclear devices. Cenco Educational Films, 1700 Irving Park Rd., Chicago 13.

For more details circle #40 on mailing card.

"Our Pioneering Heritage," 36½ min., narrated by Chet Huntley, covering the century from 1860 to 1960, and "Take Time for Your Teeth," 13 min., starring Alexander Scourby and presented by Johnson & Johnson, both 16mm sound and color films. Association Films, Inc., 347 Madison Ave., New York 17.

For more details circle #41 on mailing card.

"The Charter," first of a series of films about the United Nations, its Charter and Organization, designed to serve as an introduction to a comprehensive study of the UN. Contemporary Films, Inc., 267 W. 25th St., New York 1.

For more details circle #42 on mailing card.

(Continued on page 124)

S
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Harrington High School of Lower Merion, Rosemont, Pa.
ARCHITECT: Vincent G. Kling, F.A.I.A., Philadelphia
CITATION: 1960 AASA School Building Architectural Exhibit

first choice in leading schools

• FOR EASIEST WRITING . . . READING . . . CLEANING

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The growing number of award winning schools using slate chalkboards confirms . . .

SLATE GIVES

- ▶ superior visibility
- ▶ unsurpassed writing and erasing qualities
- ▶ lowest cost per year
- ▶ easy maintenance
- ▶ timeless good looks

Write for your free kit of five (5) informative and authoritative booklets on the selection, use and care of chalkboards. You'll find them most helpful.

500 million years in the making.....

NATURAL SLATE

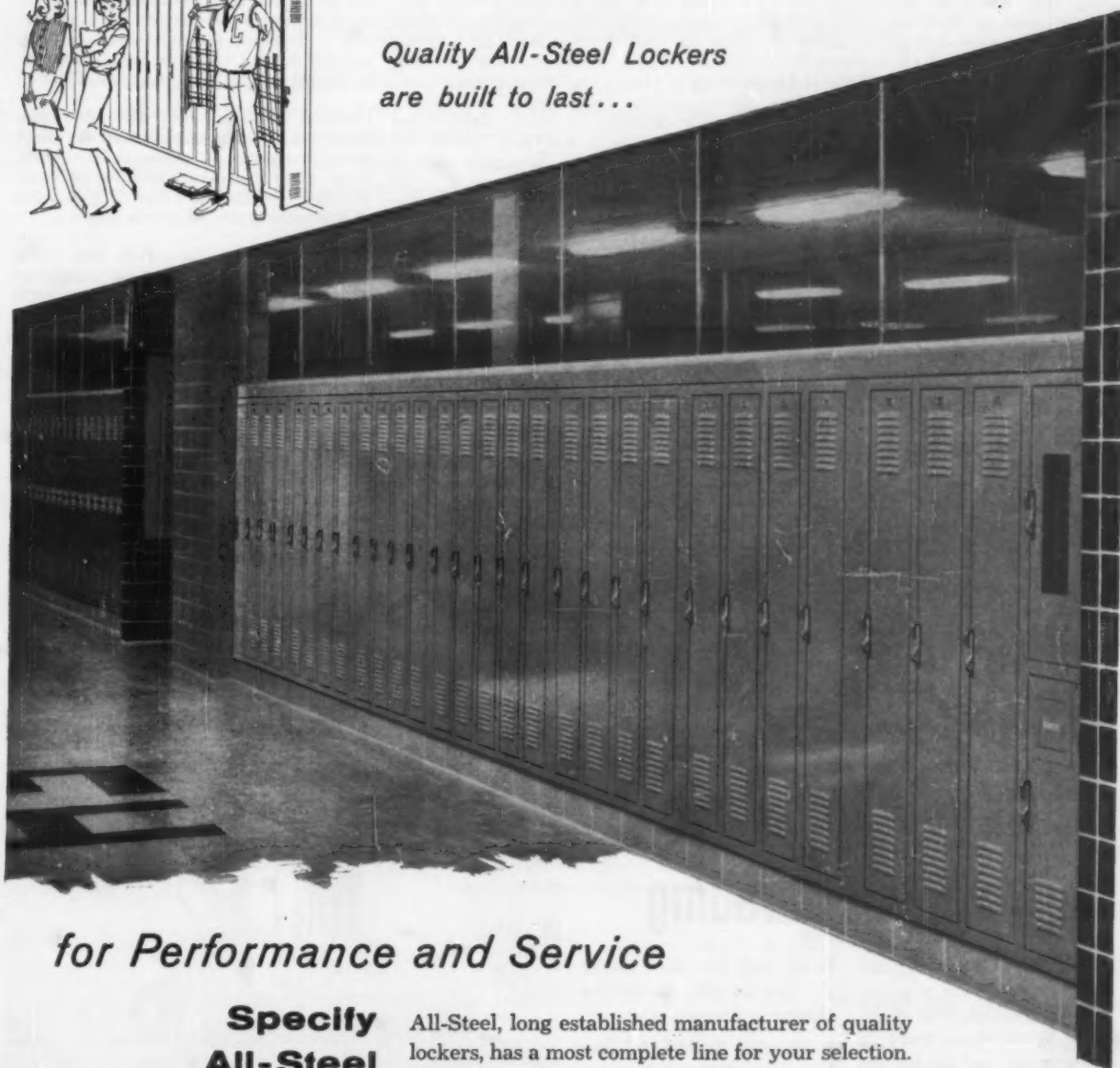
PENNSYLVANIA SLATE PRODUCERS GUILD, INC.

Pen Argyl, Pennsylvania

Sponsored by producers of Pyramid and Keystone American natural slate chalkboards



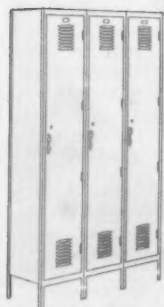
*Quality All-Steel Lockers
are built to last...*



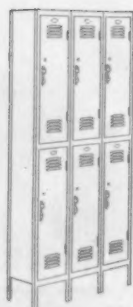
for Performance and Service

**Specify
All-Steel**

All-Steel, long established manufacturer of quality lockers, has a most complete line for your selection. There is a style and size to meet your requirements. See and compare All-Steel Lockers. There is a real difference. For dependable performance and service there is none better. See your locker distributor or send now for information and illustrated catalog.



Single-Tier Lockers



Double-Tier Lockers



Box Lockers

All-Steel

ALL-STEEL EQUIPMENT INC.
Aurora, Illinois



Desks • Chairs • L-units • Credenzas • Tables • Bookcases
Lockers • Filing Cabinets • Storage Cabinets

"Mark Twain Gives an Interview," featuring Hal Holbrook, filmed at Mark Twain's home in Hartford, Conn., 13½ min., color or black and white. Series of five 15-min. films in which Bertrand Russell discusses Philosophy, The Role of the Individual, Power, The Future of Mankind, and Happiness, conducted as interviews by Woodrow Wyatt, BBC commentator and Labor M.P. Coronet Instructional Films, 65 E. South Water St., Chicago 1. For more details circle #43 on mailing card.

"Our Southern Neighbors," filmstrip on Latin America covering the Alliance for Progress and the new program for U.S.-Latin cooperation, 56 frames. The New York Times, Office of Educational Activities, 229 W. 43rd St., New York 36. For more details circle #44 on mailing card.

Sound filmstrips to teach French, Spanish and German, for teachers of foreign languages, eligible for purchase under Title III, NDEA. "Pathfinder Westward," six-part series, 52-55 frames, with sound; "The Story of Handel's Messiah," biographical filmstrip; "Learning About the Seasons," nature study series, four filmstrips and two records; "Basic Primary Phonics - Group III," six-part filmstrip series; "Foundations for Occupational Planning," five-part guidance study filmstrip series, and "Happy Times in the Home and Family" for kindergarten classes, four filmstrips and two records. Society for Visual Education, Inc., 1345 Diversey Pkwy., Chicago 14. For more details circle #45 on mailing card.

"Space Age" educational films: "Holloman - Frontier of the Future," 25-min. film reviewing achievements in the development of guided missiles and rockets; "Count Down," 27-min. film showing planning and preparation necessary to launch rocket; "Space Orbits," 18-min film on basic principles of orbital patterns and forces producing them, and "Survey of Astronautics," 23-min. film presenting a theoretical forecast of the future of astronautics, all color films produced by the U.S. Air Force. United World Films, Inc., Government Dept., 1445 Park Ave., New York 29. For more details circle #46 on mailing card.

Suppliers' News

Bally Case & Cooler, Inc., Bally, Pa., manufacturer of refrigerated display cases and walk-in coolers and freezers, announces completion of a new modern steel and concrete building designed to house two special manufacturing operations: the construction of sealed multi-glass units used in the display cases where complete air conditioning, with low humidity and high air filtering are essential; and a new Detrex degreasing system, for processing the steel frames of all display cases preparatory to finishing with rust-resistant coatings. The fireproof building is constructed under the latest concepts in industrial building design.

Campbell Soup Company, Camden 1, N.J., manufacturer of food products, announces a new policy in regard to institutional

sales, including the formulation and packing of special and exclusive products to meet the needs of quantity food service, with a separate research group working entirely on this problem. Seven new institutional products are now available.

Geerpres Wringer, Inc., P.O. Box 658, Muskegon, Mich., manufacturer of floor mopping equipment, announces its fourth major plant expansion, doubling its manufacturing facilities and including enlarged and improved shipping and handling.

Harmon Cabinets Inc., P.O. Box 1464, Tacoma 1, Wash., announces completion of an expansion program, including more than 10,000 square feet of space devoted exclusively to the production of classroom cabinets. The company manufactures its own plywood as well as much of the other material that goes into its line of over 200 classroom storage facilities.

Superior Coach Corp., Lima, Ohio., manufacturer of school bus bodies, announces completion of a new plant addition with over 100,000 square feet of floor space, to meet the increased demand for Superior school bus coaches. Featuring the newest factory design innovations, the new building provides for efficient materials storage and handling, and employs static air principles that enable the building to be cooled and heated without closing the several bus entrance and exit doors, and elimination of dust in the air through polarization of dust particles.

When you buff floors... buff without abrading

Don't buff your floors with the stripping action of gritty, nylon abrasants. Use Brillo Steel Wool Floor Pads to smooth out and harden the protective wax coating to a high-gloss finish.

The cross-stranded steel fibers are compressed to wear longer... to clean and polish thoroughly in all directions. Because Brillo Pads are solid discs, they cover the entire working surface to do the job

faster with less swirl marks... give an even, mirror-like finish no other pads can equal.

There's a Brillo Solid Disc Steel Wool Floor Pad for every job... scrubbing, dry cleaning or buffing. Send for free instructive folder today.

To strip floors completely
Use BRILLO Syndisc®
REVERSIBLE FLOOR PADS

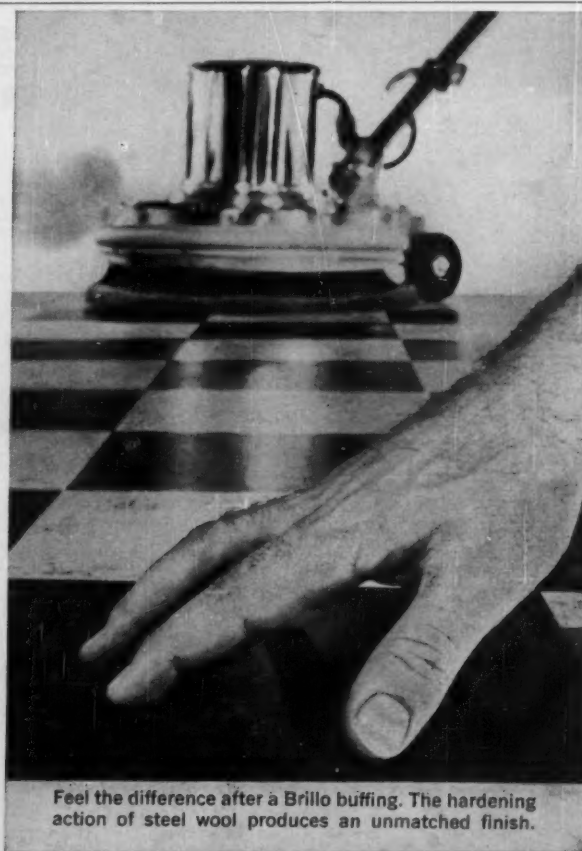
BRILLO®

SOLID-DISC

STEEL WOOL FLOOR PADS

BRILLO—the Safe Way to Beautiful Floors

BRILLO MFG. CO., INC., BROOKLYN 1, N. Y.



Feel the difference after a Brillo buffing. The hardening action of steel wool produces an unmatched finish.

INDEX TO ADVERTISEMENTS

USE THIS PAGE TO REQUEST PRODUCT INFORMATION

The index on this and the following page lists advertisements in this magazine alphabetically by manufacturer. For additional information about any product or service advertised, circle the manufacturer's key number on the detachable postcard and mail it. No postage is required.

Products described in the "What's New" pages of this magazine also have key numbers which appear in each instance following the description of the item. For more information about these items, circle the appropriate numbers on the postcard and mail it, without postage, to The Nation's Schools.

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I am interested in the items circled—

December, 1961

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TITLE

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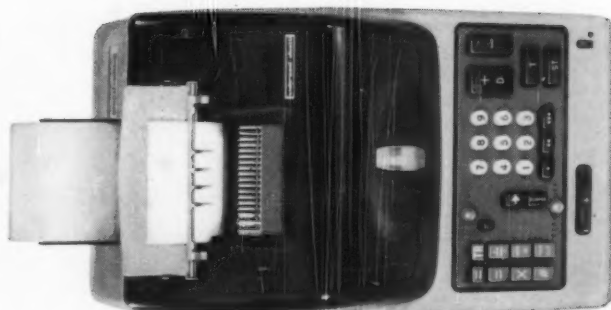
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